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ABSTRACT

The charge of the Committee on Strategies for Excellence was to examine the current status of elementary and secondary education in Iowa, and to investigate ways in which school districts could be educationally more productive. The report brings together recommendations from various state and national reports, reviews the literature, and makes recommendations to school boards that can be used as goals for improvement. A comprehensive set of recommendations about programs and services that schools should be providing to Iowa school children is titled the "Productive School Model." The model, intended to be used as a benchmark for setting school district goals, also includes recommendations regarding local policies for staffing, facilities, and school finance. Recommendations are organized into four areas: (1) educational framework; (2) educational program; (3) human resources in education; and (4) educational environment. Suggested strategies that school districts might utilize include technology in education, pupil/teacher ratios, innovative school programs, sharing, school reorganization and dissolution, utilization of supplemental resources, alternative staffing arrangements, building utilization options, and alternative revenue sources. A list of suggested items for legislative action is included along with a section of recommendations for actions by other education organizations. A "Strategies for Excellence Evaluation Form" and a bibliography are appended. (MLF)

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STRATEGIES FOR EXCELLENCE

EA 019 882

Foreword

The Committee on Strategies for Excellence was created by the Board of Directors of the Iowa Association of School Boards in May of 1986. The charge of the committee was to examine the current status of elementary and secondary education in Iowa, and to investigate ways which school districts could be educationally more productive.

The 14-member committee was made up of representatives of local school boards, superintendents, area education agencies, principals, school business officials and the general public. The committee was assisted in its work by Dr. Barry Steim from the Drake University Research Institute, and Phil Dunshee, IASB Director of Government Relations.

This report culminates six months of intensive work by the committee. I think it is fitting to extend a special "thank you" to the committee members for their dedication to improving our public schools, resulting in the development of this report.

This report is unique in that it brings together recommendations from various state and national reports, reviews the literature and makes recommendations to school boards that can be used as goals for improvement.

The tasks the committee undertook were to:

1. Develop a Productive School Model that will have components that any school district can use as *goals* to maximize educational opportunity and achievement for Iowa's elementary and secondary school students. (I must emphasize here that these *goals* are NOT legislative recommendations and they are NOT minimum standards.)
2. Identify strategies which school districts can use to achieve the model components. The final report contains actual examples of strategies being used by school districts in Iowa.
3. Development of an assessment form for local schools to use to evaluate their use of the Productive School Model components.

The committee has organized its recommendations into four areas as a "set of goals" for the Productive School Model. Those areas include:

1. Educational Framework
2. Educational Program
3. Human Resources in Education
4. Educational Environment

The model is a comprehensive set of recommendations about programs and services schools should be providing to Iowa children. The model also includes recommendations regarding local policies for staffing, facilities, and school finance.

The Productive School Model is intended to be used as a benchmark for setting school district goals. Local school officials can compare the programs in their schools with characteristics of the model. Again, the recommendations are not intended as standards or legislative recommendations. Officials can then take actions which may cause their school to acquire the characteristics of the model. We recognize that achieving the model will not be a simple task. The Strategies for Excellence section of the report presents a discussion of the alternative actions which local school officials may consider using to achieve the Productive School Model. Most of the ideas are not new. Many are currently being implemented in Iowa school districts. Not all are easy to accomplish — some are very controversial.

In order to achieve the Productive School Model, or to implement some of the strategies which have been discussed in this report, some statutory changes are necessary. In the Legislative Recommendations section is a list of suggested items for legislative action.

The report also includes a section of recommendations for actions by other education organizations. Included in this list are the Department of Education, Iowa Association of School Boards, area education agencies, merged area schools and independent colleges and universities.

As local school officials, we *cannot* and *should not* wait for the legislature or anyone else to solve our problems. If we are to fulfill our primary mission, a quality educational program, then school board members must take the initiative. This report and its assessment form give schools an effective and time efficient approach to goal setting for school improvement. Besides addressing the needs of our public school students, this report makes a strong statement about the importance of a strong administrative team and instructional staff.

As chairman of this committee, I hope that you accept this concept as a means to change in our schools. Some of the recommendations may not be applicable or practical in all districts. This report offers a general framework — many of the recommendations do not have specific definition by design — this we feel, allows for districts to exercise their local control.

The recommendations are, in many cases, supported by research in the area, are a recommendation common in many education reports, or are a recommendation by the committee as a goal that will encourage school districts to stretch a bit. This report is aggressive, and in some instances may step on some toes. As the committee deliberated on the issues contained in the report, there was not unanimous support for all issues, but a consensus was reached on all issues left in the report.

We hope that this report will ignite the will of local school board members to choose their own destiny rather than wait for someone else to do it for them. Through the use of this report, I am optimistic that local boards will use the educational dollars in Iowa to further maximize the educational opportunity and achievements of our public school students.

Timothy J. Struecker, D.V.M.
Algona
Strategies for Excellence Committee Chair

NOTE: The IASB Delegate Assembly met on Jan. 21, 1987 and considered the receipt and endorsement of the report of the IASB Committee on Strategies for Excellence. The report was adopted by the Delegate Assembly by the following motion: That the IASB Delegate Assembly endorse the report of the IASB Strategies for Excellence Committee, and that:

- *Part II — The Productive School Model and Part III — Achieving the Productive School Model of this report be commended to school boards and school officials for study and application as appropriate in the local school districts and,*
- *Further, that Part IV — Legislative Recommendations be a part of the Beliefs and Resolutions on which action by the Iowa General Assembly be sought, and*
- *Finally, that Part V — Recommendations to Other Education Organizations be referred to each organization.*

Motions made to not endorse the following items were approved. These items will not become part of the IASB Legislative Resolutions:

Allow school districts which establish early graduation programs to count pre-kindergarten students in the school district's enrollment for the school finance formula.

Remove state regulations which require that academic sharing be a prerequisite to athletic sharing agreements.

Strategies for Excellence Examples

Listed periodically throughout this publication are examples which illustrate Iowa schools which are already pursuing activities to enhance excellence. These examples are just a few among the many innovations underway throughout Iowa's schools, and are described here to illustrate the strategies for a Productive School Model. The examples are by no means definitive of the broad range of creative approaches being taken to education in this state.

A listing of the examples follows:

Page	Topic
16	Technology in Education
18	College Credit in High School
20	Dropout Programs
23	Pre-kindergarten Programs
24	Child Care Programs
25	Extracurricular Activities
36	Successful Student Assessment
37	Use of Volunteers
41	Use of Computers in the Curriculum
43	Successful Sharing Program
46	Reorganization

Acknowledgements

Thanks are extended to all those who contributed to the work of the IASB Committee on Strategies for Excellence. Without their assistance, this report could not have been completed within the short six months in which the committee worked.

The following individuals shared their knowledge and experience with the committee:

John Martin, Department of Education
Guy Ghan, Department of Education
Dr. Robert McFarland, Superintendent, Marshalltown Community School District
Dr. Leland Rankin, Superintendent, and Principals James Tyson, David Morgan and Larry Kruckenberg, Colfax-Mingo Community School District
Iowa Association of Independent Colleges and Universities
Association of Community College Superintendents

Special thanks go to the staff of the Department of Education, who provided background information which was used by the committee in the preparation of the report.

STRATEGIES FOR EXCELLENCE
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Part I. Introduction

The Committee on Strategies for Excellence was created by the board of directors of the Iowa Association of School Boards in May of 1986. The charge of the committee was to examine the current status of elementary and secondary education in Iowa, and to investigate ways in which school districts can be more productive. For the purpose of this review, "productivity" means the degree to which Iowa schools provide access to quality educational programs which meet the needs of all Iowa students.

The Productive School Model

In order to organize our work, we have prepared a "Productive School Model." The model is a comprehensive set of recommendations about programs and services schools should be providing to Iowa school children. The model also includes recommendations regarding local policies for staffing, facilities and school finance.

The purpose of the model is to identify an educational program which we believe should be accessible to every student in Iowa. Where possible, we have supported the many characteristics of the model with the most current educational research. The model establishes goals (not standards) which every Iowa school district should try to achieve. It is not intended to be used as the basis for any minimum state standards. However, officials in school districts which do not have an educational program which is similar to the model should take a hard look at their structure and operations.

Strategies for Excellence

We recognize that achieving the model will not be a simple task. If it were, there would be no need for this study and there would be no disparity in the educational programs of Iowa schools.

With that in mind, we have identified various strategies which school districts may use in their efforts to achieve the characteristics of the Productive School Model. Suggested strategies include technology in education, pupil/teacher ratios, innovative school programs, sharing, school reorganization and dissolution, utilization of supplemental resources, alternative staffing arrangements, building utilization options and alternative revenue sources.

Improving the productivity of Iowa schools requires that available resources be utilized in a manner which provides the greatest possible access to educational programs. It does not necessarily mean reducing the total cost of the current education system; it implies a reallocation of current resources. Any savings which are the result of recommendations from this study should be directed toward unmet educational needs.

This report is designed to help show the way for local school board members to choose their own destiny, rather than wait for someone else to do it for them. We hope that our efforts will result in positive changes to the form and substance of Iowa's public education system.

The Current Status of Elementary and Secondary Education in Iowa

As a prerequisite to the preparation of the Productive School Model and to the identification of the strategies that could be used to achieve the model, the committee first reviewed the current status of education in Iowa.

We believe that Iowa still has a good, strong, education system. But it can be improved. As Iowans, we should not lull ourselves into a false sense of security. We need to recognize that Iowa's national education image may have slipped somewhat in recent years.

Because Iowa students rank at the top on college entrance exams and because Iowa already has a quality education system, some would argue that we do not need to take the actions that other states have taken. Such arguments require further examination.

College Entrance Exams

The most recent results of the two major national college entrance exams show that Iowa students who took those tests scored among the best in the nation. Iowa students ranked first in the American College Testing Program (ACT) and first or second in the Scholastic Aptitude Test (SAT). There is no disputing those results, but they require some qualification. In 1985-86, only 3% of Iowa graduates (1,557) took the SAT test, while in other states a much higher percentage of graduates took the SAT. For example, in California 38% of the graduates took that exam, and in Connecticut, 69% of the graduates took the SAT.[1] The primary reason for this difference is that Iowa students are not required to take the SAT in order to be admitted to an Iowa college or university. Postsecondary schools in Iowa rely primarily on the ACT. Those students who are considering making application for admission to schools outside of Iowa are most likely to take the SAT.

On the other hand, 57% of Iowa graduates took the ACT in 1986. In that year, 22,459 Iowa graduates took the ACT. Compared to graduates in other states who take the ACT, Iowa graduates ranked first.[2] It cannot be said that only a few Iowa students take the ACT test, as is the case with the SAT. However, about 23 states do not rely on the ACT and only a small percentage of students in those states take the test.

While Iowa students have ranked high nationally on the ACT, school officials should not use the results as a reason for maintaining the status quo. We believe that there are education needs in Iowa that are not being satisfactorily addressed and that the state can do better.

Iowa's National Education Image

Since 1983, numerous reports have been issued which make recommendations for the reform of education in the United States. State legislatures, governors and state boards of education throughout the nation have initiated many proposals which they hope will accomplish those reforms. Local school officials have also initiated changes in response to those reports. However, local actions have gone largely unrecognized at the state and national level, because little has been done to document and report them. Furthermore, state policymakers in Iowa have not had to make the changes which other states have. Current Iowa standards already exceed or equal many of the reforms that have been initiated in other states.

Total Public Enrollment [3]
Students
In Thousands

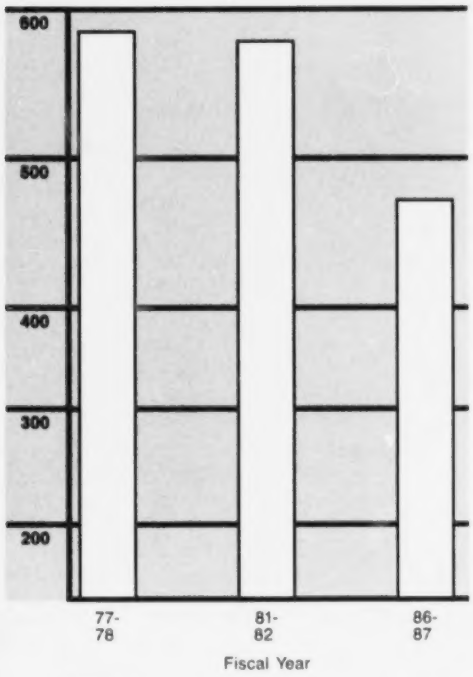


figure 1

School District Budget Cuts [4]

Fiscal Year	$ Cutback
1980-81	27.8 million
1983-84	19.2 million
1985-86	28.6 million

Public School Enrollment [5]

Fiscal Year	Total Public Enrollment
1977-78	587,113
1978-79	569,729
1979-80	550,023
1980-81	535,732
1981-82	518,828
1982-83	505,407
1983-84	497,562
1984-85	490,924
1985-86	485,586
1986-87	481,195

Attempts have been made in Iowa to make sweeping changes, but lack of sufficient revenue and disagreement among state policymakers about which course to take have prevented the reforms from being enacted. The changes which have been made in state policy have focused primarily on changes in educational standards and some modest changes in the training and evaluation of professional educators. The state has initiated a process for studying and developing the standards for the approval and accreditation of Iowa's schools. New standards for Iowa school districts will be fully implemented in 1989. Because little action has been taken at the state level, compared with other states, Iowa's national education image may have declined.

We do not suggest that Iowa policymakers take action simply to improve the state's ranking on the various national report cards. While it is not certain that sweeping reforms are necessary in Iowa, state policymakers and local school officials have a responsibility to examine the current status of Iowa's education system. Where necessary, improvements should be made. We believe that the most appropriate place for initiating these improvements is at the local level.

The Financial Backdrop: 1980-1986

A review of the financial circumstances under which school districts have operated in recent years and a review of the actions which school districts have taken to reduce costs, is necessary in order to fully understand the current status of Iowa education and to provide an appropriate context for our recommendations.

1. Reductions in State Aid

Total funds authorized to Iowa school districts through the school foundation program have increased by 26% between the 1980-81 and 1985-86 school years; from $1.36 billion to $1.71 billion. The portion of those total funds from state revenue sources has increased by 22%, from $603 million to $737 million.[1]

During that time period, the state has failed four times to fully fund those authorizations because of state budget and revenue constraints. The amount of state aid which school districts and area education agencies have not received due to those cutbacks is $75.6 million. These cutbacks occurred during the budget year. Consequently, school districts were forced to make unanticipated reductions in their operating budgets and educational programs.

2. Declining Enrollment

Total public school enrollment has declined in each of the past nine years, a decline of 18% for the period. There are 105,918 fewer K-12 public school pupils in 1986-87 than there were in 1977-78 (see fig. 1).

3. School Budgets and CPI

The state has recognized that some fixed costs do not decrease in proportion to the decline in school enrollments. In an effort to cushion the effect of declining enrollment, the state has established two mechanisms designed to adjust the budget enrollment of school districts. This is important, because schools are funded on a per pupil basis. By using these mathematical cushions to sustain the enrollment figures which are used to determine the amount of a school district's budget, school budgets have not declined in proportion to the actual declines in school enrollment.

Enrollment 1980-87*

Fiscal Year	Actual Enrollment	Budget Enrollment*
1980-81	535,732	571,473
1981-82	518,828	562,626
1982-83	505,407	546,492
1983-84	497,562	533,726
1984-85	490,924	531,989
1985-86	485,586	521,276
1986-87	481,195	517,151

*Excluding the weighting for special education students and the supplementary weighting for shared programs.

School Purchasing Power 1980-86*

Fiscal Year	Actual Authorized Funds	Adjusted Authorized Funds*
1980-81	$1,072,679,428	$434,632,780
1981-82	$1,108,142,138	$406,956,330
1982-83	$1,154,607,656	$339,380,040
1983-84	$1,198,593,381	$401,673,390
1984-85	$1,224,574,175	$393,247,980
1985-86	$1,266,929,193	$393,212,040

*Adjusted to 1967 dollars - Foundation Program Regular Program Budget

While school budgets have been sustained to a certain extent in the face of significant enrollment declines, budgets have not kept pace with inflation. Total authorized funds through the school foundation formula, adjusted to 1967 dollars, have declined in purchasing power by 9.5% over the period. Actual enrollment has declined by 10% during the period.

4. State Aid Distribution

One of the primary purposes of the school foundation program was to reduce the reliance by schools on property tax as a source of revenue. Forty-two percent of school general funds (includes all sources of revenue) are currently provided by local property tax[8], as compared with 66.1% in 1971[9], when the school foundation program was established.

However, the state contribution to individual school budgets varies widely. For the 1985-86 school year, the per pupil amount of state aid received ranged from a high of $1507.09 in the Norwalk school district, to a low of $20.01 in the Remsen-Union school district[10]. Generally, the amount of state aid which is received by a school district is a function of taxable property valuations. School districts which have high property valuations receive less state aid than school districts with low valuations.

We have in several instances compared the expenditures and educational programs of school districts of different enrollment categories. Of particular interest has been data for school districts with the lowest enrollments.

An analysis of state aid distribution reveals that the smallest school districts receive the lowest amount of state aid. The committee examined the amount of state aid distributed to school districts with a budget enrollment of less than 300. For the 53 school districts in this category, total state aid received in the 1985-86 school year was approximately $8,588,000. That amounts to just slightly more than 1% of the total amount of state aid distributed in that school year. The budget enrollment in these school districts comprises over 2% of the total budget enrollment in the state.[11]

School districts which have very high assessed valuations receive relatively little state aid, because the $5.40 foundation property tax levy generates revenue which is nearly sufficient to fund a school district's controlled budget. Some school district budgets generate only the minimum $200 per pupil in state aid, as provided by the school foundation formula.

5. Property Taxes

In 1986-87, Iowa school districts will levy an estimated total of $831 million in property taxes. Approximately 90% of that amount is levied for general fund operating expenditures. The balance is levied for the schoolhouse fund, which primarily consists of taxes for bonds and interest, the schoolhouse tax and the site levy.[12]

The average general fund tax rate per $1,000 of valuation statewide in the 1985-86 school year was $10.42, a decline of $.20 since the 1984-85 school year. Generally, property tax rates in Iowa school districts have declined in recent years.[13]

In the 1985-86 school year, the statewide controlled budgets of Iowa school districts, excluding the schoolhouse fund, amounted to $1,461,852,622. (The controlled budget refers to funds derived from the school foundation formula; other sources of general fund revenue are excluded from this amount.) Of that amount, $737,800,187 was funded by state aid and the balance was funded by property taxes. In other words, about 50% of the controlled budgets of Iowa school districts are funded by property taxes.[14]

Percentage of Change in Local School District Enrollment 77-78 to 84-85 [17]

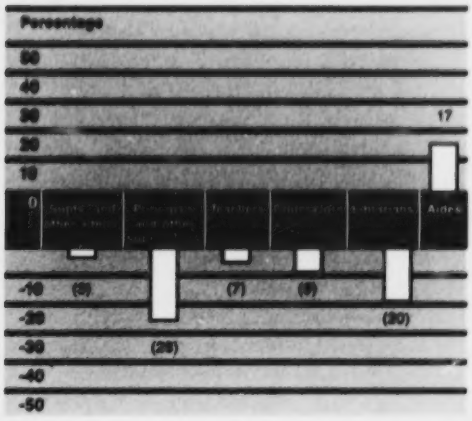


figure 2

6. School Employment

In the 1977-78 school year, local school districts employed 41,692 people. Of those employees, 33,424 were teachers and 8,268 were employed in a position other than as a teacher, including counselors, librarians, aides, principals and superintendents. The number of school administrators employed that year was 2,588. In that year, area education agencies employed 2,941 people. In the 1984-85 school year, local school districts employed 39,940 people. Those employees included 31,029 teachers and 8,911 other employees. The number of school administrators employed that year was 2,003. Area education agencies had 3,770 employees.

The number of teachers declined by 2,395, or 7%. The number of school administrators declined by 585, or 23%. The number of AEA employees increased by 28%. (The largest growth period for the AEAs was between the 1977-78 and 1979-80 school years. This was at the time when the AEAs were gearing up for their services to local school districts, following their creation in 1975. Since 1979-80, employment in the AEAs has increased by 4.7 percent.)

Included here is a table which lists the decline in employment for several categories between 1977-78 and 1984-85 (see fig. 2).

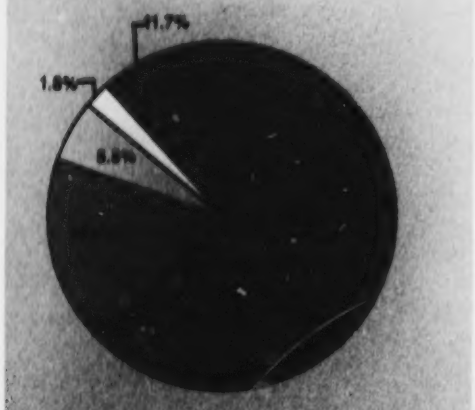
7. Energy Management and Cost

In 1980-81, $57,164,436 was spent on energy consumption, or 4.7% of general fund expenditures ($1,215,600,825). This breaks down as follows: heat - $23,089,951; lights - $17,468,546; fuel other than heat (gasoline) - $16,605,939.

In 1984-85, $64,867,104 was spent on energy consumption, down to 4.5% of general fund expenditures ($1,425,783,657). This breaks down as follows: heat -$29,346,546; lights - $23,725,098; fuel other than heat (gasoline) - $11,795,460.

In that four year period, expenditures for energy increased by $7,702,668; a 13.47% increase. Adjusted for inflation, in 1967 dollars, expenditures for energy consumption have declined by about 7%. [18]

Distribution Of Districts And Pupils 85-86
Number/Percentage Of Districts



Enrollment	No of Districts	% of Districts
<[illegible]	61	11.7%
[illegible]-[illegible]	80	20.6%
400-[illegible]	84	21.6%
600-[illegible]	87	22.3%
1000-[illegible]	73	16.5%
2500-7499	24	5.5%
7500+	9	1.8%

figure 3

The Effect of a Pupil Driven Funding Formula

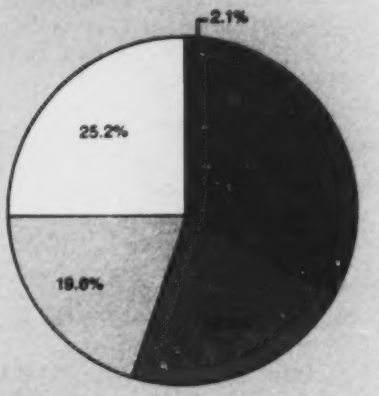
Educators, policymakers and the public in Iowa sometimes misunderstand the relationship between the method which is used to fund Iowa schools and the ability of school districts to offer a quality education. The primary reason for this misunderstanding is that Iowa school districts receive funds on a "per pupil" basis. Generally, each Iowa school district receives about the same amount of funding per pupil. This may lead one to believe that each Iowa school district should be able to offer a comparable educational program. However, various fixed costs, certain types of variable costs and costs unique to certain school districts due to geography or demographic characteristics prevent this generalizaton from being realized.

A generalization that can be made is that there is a relationship between the enrollment of a school district and the educational program which is provided by that school district. As enrollment increases, school districts are able to provide a broader range of educational programs and services (see figs. 3 & 4).

1. Variance in per pupil funding

For the 1986-87 school year, the district cost per pupil (based on budget enrollment, including supplemental weighting for special education and declining enrollment) ranged from $2,452 in Jesup to $2,779 in Nishna Valley. The state cost per pupil in 1986-87 is $2,503. Two hundred sixty-four school districts exceeded the state cost per pupil in 1986-87. [19]

Distribution Of Districts And Pupils 85-86[17]
Number/Percentage Of Pupils



Enrollment	No of Pupils	% of Pupils
<250	10,054	2.1%
250-399	28,993	6.0%
400-599	46,830	9.6%
600-999	72,523	14.9%
1000-2499	109,427	22.6%
2500-7499	94,918	19.6%
7500+	121,913	25.2%

figure 4

Cost Per Student Transported[20]

Enrollment	Cost per Student
Up to 250	$281.99
250 - 399	$258.15
400 - 599	$263.17
600 - 999	$265.67
1000 - 2499	$264.87
2500 - 7499	$215.31
7500+	$240.14

Transportation Cost Per Average Daily Membership[21]

Enrollment	Cost Per ADM
Up to 250	$171.18
250 - 399	$180.23
400 - 599	$162.38
600 - 999	$175.16
1000 - 2499	$140.86
2500 - 7499	$ 88.85
7500+	$ 70.24

Energy Cost Per Average Daily Membership 1984-85[24]

Enrollment	Expenditure
Up to 250	$206.48
250 - 399	$176.79
400 - 599	$156.97
600 - 999	$152.40
1000 - 2499	$130.68
2500 - 7499	$ 45.88
7500+	$ 53.24

Funding for Iowa school districts, based on the actual student headcount, varies more widely, ranging from $2,413 per pupil in Adel-DeSoto, to $4,133 per pupil in Corwith-Wesley.[19]

2. Variance in School District Expenditures

Transportation

The average cost per pupil transported in 1985-86 was $252.74. In 1985-86, the average cost per average daily membership was $123.28. For the seven enrollment categories used by the Department of Education, the cost per student transported increased slightly as district enrollment decreased. However, a difference of $41.85 between the average cost per student transported between the largest and smallest enrollment categories does not fully demonstrate the variance in expenditures for transportation.

For the same enrollment categories the range of costs per average daily membership is more marked; a difference of $100.94 between the average costs of the largest and smallest enrollment categories.

Specific examples more clearly demonstrate the different costs in transportation in Iowa school districts. West Burlington, a district with an average daily membership of 495 in 1984-85 and covering three square miles, had zero transportation costs. Two other districts, Remsen-Union and Bayard, with average daily memberships of 347 and 184 respectively, had the highest per pupil transportation costs in 1984-85. Bayard's cost per pupil transported was $574.93 and Remsen-Union's cost per ADM was $391.36.[22]

Energy

Energy costs also vary significantly among local school districts. For example, the average expenditure per average daily membership (ADM) in 1984-85 for heat was $60.78 and for fuel other than heat was $24.42. Average expenditures per ADM for heat ranged from $104.01 in the smallest enrollment category to $51.32 in districts with an enrollment of 7,500 or above. For fuel other than heat, expenditures similarly ranged from $46.75 to $10.48 per ADM. Differences in expenditures for lights were present, but were not as pronounced.[23]

Variances in total expenditures for energy in Iowa school districts, which averaged $134.36 per average daily membership, are listed below for each enrollment category.

NCSL Study

In 1982, a study sponsored by the National Conference of State Legislatures, (NCSL) and funded by the National Institute of Education and the Iowa General Assembly, examined the expenditure patterns of Iowa school districts and compared those patterns with the method of funding public schools.

The results of the study showed that expenditure patterns closely fit a "U" shaped curve. The study said, "Per pupil costs in smaller districts are higher than costs in medium to large sized districts and per pupil costs in very large districts are greater than costs in medium to large sized districts. Or, restated, costs are first declining as size increases up to a certain point and then costs begin to increase as size increases further. The "U" shape is due to economies and diseconomies of scale."

Instructional Expenditures
General Education Costs Per Pupil[5]

Enrollment	Expenditure
Up to 250	$1475.78
250 - 399	$1332.37
400 - 599	$1299.30
600 - 999	$1314.19
1000 - 2499	$1311.66
2500 - 7499	$1398.21
7500 +	$1368.06

Instructional Support Expenditures
Library Services Costs Per Pupil[6]

Enrollment	Expenditure
Up to 250	$73.36
250 - 399	$65.69
400 - 599	$60.12
600 - 999	$69.41
1000 - 2499	$65.44
2500 - 7499	$67.33
7500 +	$71.18

Central Service Expenditures
Operation and Maintenance Costs Per Pupil[7]

Enrollment	Expenditure
Up to 250	$403.36
250 - 399	$352.47
400 - 599	$338.18
600 - 999	$347.37
1000 - 2499	$344.12
2500 - 7499	$364.58
7500 +	$410.82

A cursory examination of expenditure data from the 1984-85 school year suggests that economies and diseconomies of scale may continue to be present in Iowa schools. The study examined five categories of cost measures from the Secretary's Annual Report: Instructional Costs, Student Services Costs, Instructional Support Costs, General Administration Costs and Central Service Costs. The results of the NCSL study indicated that the expenditure categories of Instructional Costs, Administrative costs, as well as overall average costs (costs of all categories) followed a "U" shaped curve, i.e. costs per student in smaller schools are higher on average than in larger schools and the costs are higher on average in the very large schools than in the not so large schools.

Included here are three examples of expenditure data for items which were included in the NCSL study.

The study concluded that actual funding of schools varied widely from the expenditure patterns in schools, i.e. there appears to be little relationship between the costs of operating various sized school districts and the amount of funds provided to the districts by the school foundation program.

If state policymakers believe that the amount of funds distributed to school districts should more closely match the expenditure patterns in districts with different enrollments, then some changes in the school finance formula are required. Two options are evident: either adjust the method of funding Iowa schools to more closely match the "U" shaped expenditure curve, or adjust the structure of Iowa schools such that the economically "optimum" size is attained. In this sense, "optimum" means that schools are of a size at which further increases in enrollment no longer produce economies of scale.

Four sessions of the Iowa General Assembly have been held since the NCSL study was completed. A review of the actions of the legislature during that time period should provide local policymakers with some insight about what can be expected from the legislature in the future.

Adjust School Funding to Match the "U" Curve

The legislature has taken little action in the past four years which would provide additional funding to school districts with low enrollments. Some additional funding was provided to school districts which enter into sharing agreements. Funding for small sized school districts does not match the higher costs in those schools. Some school districts have dealt with this funding problem by offering reduced educational opportunities, increasing staff workloads, paying comparatively lower salaries to their professional employees and foregoing various professional and student support services.

Representatives from school districts with low enrollments have specifically requested additional financial support from the legislature, but no action has been taken. For example, in 1985, testimony was presented to a legislative interim study committee on school finance suggesting that additional support for schools with small enrollments should be provided by the state. The legislature took no action on this recommendation during the 1986 session of the Iowa General Assembly. Further, much of the discussion in recent legislatures has focused on the enrollment cushion and the budget guarantees (the so-called "phantom" pupils) which were put in place by previous legislatures to soften the impact of declining enrollment. Several proposals have been made to eliminate those cushions and "put the money where the kids are." In spite of the popularity of criticizing these funding mechanisms, there has not been sufficient support in the legislature to eliminate or curtail them.

Timothy J. Struecker, DVM
Algona and IASB
board member
and Committee Chair

As chairman, I would like to thank all the committee members for their commitment of time and energy toward the development of this report. I would hope that every Iowa school would use this model to maximize the educational opportunity and achievement of Iowa's public schools.

Proposals for additional funding in large school districts which experience some additional costs because of unique problems have also met with little success. For example, for the past several years, Iowa school districts have requested additional supplementary funding for English as a Second Language (ESL) programs. Supplementary revenue provided by the state for these programs does not equal the additional expense associated with these programs. Other problems which may be unique to larger Iowa school districts include: racial balance, school security, student turnover, higher incidence of special education pupils and a higher incidence of dropouts and other disadvantaged students.

One alternative which has been suggested in the legislature in recent years has been to add a factor to the school finance formula to reflect problems associated with student sparsity or density. Districts with very sparse populations would receive additional funds to cover certain fixed costs which could not be reduced, even if school districts were restructured. In other words, districts with very sparse populations would not experience economies of scale by reorganizing.

Similarly, districts with very dense populations would receive additional funds to cover costs associated with factors unique to their situation. In those districts, costs would not necessarily be reduced by restructuring the district into several smaller, "more optimum" sized school districts.

However, it is uncertain whether the definitions of sparsity or density can actually be applied to any Iowa school district. It should be noted that no Iowa school district has a density factor of less than one student per square mile.

Further, the districts with the largest geographic areas are not among the districts with the lowest density factors. Western Dubuque, with 555 square miles has a density of 5.66 pupils per square mile. Davis County, with 468 square miles has a density of 3.22 pupils per square mile. Finally, it cannot be assumed that districts with low enrollments also have a low density of pupils. For example, Amana has an average daily membership of 178 pupils, but has a density factor of 5.56 students per square mile.[28]

School districts with high density factors (generally, the school districts in urban areas) are also among the districts which have the broadest course offerings, the highest degree of professional and student support programs and the highest professional salaries in the state. While some of Iowa's larger school districts do experience some unique problems, it may not be appropriate to deal with those problems with a supplementary funding mechanism based on population density.

The legislature has not actively pursued the notion of funding based on sparsity or density. While some supplementary funding has been provided for specific categorical programs by the state, the amount has not been substantial, or sufficient. It is clear that the legislature has not pursued policies which would cause the funding of Iowa schools to match the "U" shaped cost curve.

Restructuring Schools to Match the "Optimum" Size

It is also clear that the legislature has not seriously considered the option of restructuring schools to a size which would result in a match between school costs and funding. The State Board of Education and various state legislators have discussed this option, but no action has been taken. In recent memory, only one recorded vote has been taken in the legislature on the issue of school size. In 1986, a proposal which would have required all school districts to have an enrollment of 300 or more was soundly defeated in the Iowa Senate.

The legislature has enacted various incentives for school districts to take such action on their own. It can also be said that the underlying financial policy of the legislature in recent years has been to penalize districts which do not pursue this course of action. While it can be asserted that the various enrollment cushions and guarantees have protected local schools from difficult educational and political choices, schools which have been receiving only the minimum 2% guarantee have not been able to keep pace with rising costs. Inflation has not allowed school districts to be held harmless from budget and program reductions. In 1985-86, 216 school districts received only the 2% minimum budget growth guarantee.[29]

Assumptions and Observations

Based on previous action by the General Assembly and on the current legislative climate, we offer these conclusions to school officials as the basis for actions at the local level.

1. The legislature is unlikely to adjust the school foundation formula to account for varying costs in school districts of different size.
2. It is unlikely that the legislature will directly address the issue of school reorganization.
3. It is likely that the legislature will continue to pursue incentives for local school officials and citizens to share or reorganize.
4. It is probable that the legislature and the State Board of Education will adopt policies and standards which will make it more difficult for some Iowa schools to continue with their current size and structure.
5. It is possible that the legislature will provide some additional financial support to assist school districts with specific categorical programs, including revenue for teacher salary increases, or that some additional sources of local discretionary revenue may be provided.

These assumptions and observations provide the basis for this study. We see little indication that state policymakers will adopt a different policy from the one which Iowa schools have experienced in recent years. Therefore, as local school officials, as citizens who are interested in providing the highest quality of education possible for our young people, what can we do at the local level which will allow us to attain our goals? What do we need to do to shape our own destiny?

Part II. The Productive School Model

We believe that all Iowa students should have access to an educational program which meets their individual needs and which provides them with the basic competencies traditionally addressed by public education. We have developed recommendations which can be used as a benchmark for local school officials to compare with the educational program in their district. The "Productive School Model" can also be used as the basis for developing strategies to meet the needs of all children in Iowa.

The Productive School Model is comprised of four major components: An Educational Framework, The Educational Program, Human Resources In Education and the Educational Environment. The model is represented by the recommendations of the Committee and it should be examined comprehensively. We believe that all of the components are important and that attention should not be focused on any single recommendation.

General Recommendations

1. All schools should have a framework within which the specific components of the educational program are established. It is important that school officials establish goals within that framework if the educational program is to be successful.
2. The educational program should be designed to meet the diverse needs of all Iowa students.
3. A well trained, effectively organized and highly motivated staff is essential to the success of an education program. The mission of Iowa's schools cannot be accomplished without the effective use of quality human resources.
4. Productive schools must provide their staff with a quality environment in which the business of education is conducted. Iowa educators and students must have adequate physical resources and tools if their efforts are to be successful. School officials must have access to, and make appropriate use of, financial resources in order to employ quality personnel and to provide an environment in which those personnel can succeed.

An Educational Framework

Each Iowa school district and each attendance center within a school district, should actively implement changes which will cause the district or attendance center to acquire the characteristics identified by the research on effective schools.

We believe that the research concerning the characteristics of an effective school provides local school officials with considerable guidance for determining the mission of the school district. Iowa schools need to apply the results in a comprehensive and coherent manner to establish district goals and policies.

In our view, a productive school is one that evaluates its goals and operations and asks the question, "How do these goals, policies and operations contribute to, or detract from, the ability of each attendance center to acquire or retain the characteristics of an effective school, based on recent educational research?"

We have reviewed the research and have identified the most frequently mentioned characteristics of an effective school. We do not offer the following summary as a recipe for an effective school, but as a general framework from which schools can begin. A productive school is one whose policymakers use their own professional judgment about the appropriate application of the research. Education policymakers should look to education research for guidance to avoid repeating the mistakes of the past.

Ken G. Steine
College Community principal

The future of education in Iowa can be improved significantly if the Strategies for Excellence report is utilized as a serious document for analyzing and improving education in Iowa. Educational change is inevitable — "Strategies for Excellence" can provide the framework for excellence in education.

Characteristics of the Effective School

A. A safe, orderly learning environment
B. Establishment of a clear school mission
C. Instructional leadership
D. High expectations
E. Frequent monitoring of student progress
F. Positive learning climate
G. Parent/community involvement is encouraged
H. Student participation is encouraged and welcomed
I. Awards and recognition are frequent
J. Structural staff development
K. Collaborative organizational processes
L. A coordinated, tightly aligned curriculum
M. A strong sense of community
N. Time on task
O. Budgeting discretion at the building level

The 15 factors which we describe here may form a framework for school effectiveness which can be used at the local level. These factors do not appear as a recipe in any one study, but were perhaps best addressed by Hallinger and Murphy in a comparative study of excellent schools.

A. **A Safe, Orderly Learning Environment**

The mission of the school is learning and the school plant and classrooms show evidence of this mission. The classroom is secure and purposeful but not oppressive. Students are held accountable for poor decisionmaking regarding appropriate school behavior. However, self-esteem and a positive school climate are of great importance. It is important that inappropriate behavior be dealt with, while protecting the self-concept of students. No student should be permitted to interfere with the learning of another student.

Students should be provided an environment that is conducive to learning and the tools to maximize their potential to achieve. This includes an environment free from chemical and asbestos hazards, accessibility for handicapped students and regular facility safety inspections.

B. **Establishment of a Clear School Mission**

District and building goals are clearly established and articulated. All staff members choose to be effective and committed to the goals of basic skill mastery and producing a capable learner. The professional staff endorses and practices collegiality in carrying out district goals and improving individual classroom performance.

C. **Instructional Leadership**

The principal is the curricular and instructional leader. More of the principal's time is spent on instructional matters than on concerns with the physical plant. Curriculum specialists and consultants support the principal in fulfilling this role. The principal manages by "walking around" and talking to the staff and observes their teaching at times other than when the formal evaluation is conducted. The principal advises and counsels on effective and new teaching techniques and is the key public relations person for the school with the staff, students, parents and the community.

D. **High Expectations**

Academics have priority. Teachers teach — students learn. Standards are high but realistic; minimum mastery levels are expected of **all students** for promotion to higher levels and new topics.

E. **Frequent Monitoring of Student Progress**

Teachers and principals are continually aware of student progress in relation to instructional objectives. Classroom testing and standardized testing are routine. The use of criterion referenced testing is strongly encouraged to more specifically identify student weaknesses. Once weaknesses are identified, individualized remediation efforts are used to quickly correct learning problems.

F. **Positive Learning Climate**

The learning climate is purposeful with more time on task. Teachers are skilled in classroom management techniques. Individualized instruction supplements group instruction and activities are meaningful to the accomplishment of stated objectives.

G. **Parent/Community Involvement is Encouraged**

Parents are viewed as partners in the education of their children. The districts actively seek public input into school practices and procedures and allow meaningful participation by the public. Parents are expected to support these policies and support their children at home. Parents are encouraged to volunteer their skills and to supplement and assist school enrichment opportunities.

H. **Student Participation is Encouraged and Welcomed**

Students participate in school policies by setting an example for other students and by assisting other students whenever possible. Broad based opportunities in extracurricular and co-curricular activities are available to students. Student participation is actively encouraged and includes opportunities in academically oriented activities as well as athletic and social activities.

I. **Awards and Recognition are Frequent**

Students are provided with ample ways to achieve. The highest awards are for academic achievement. School recognition and public awards and recognition are each a part of the system and are mutually reinforcing.

J. **Structural Staff Development**

Staff development is cooperatively planned with significant teacher input and it focuses on district priorities and commitments to professional growth.

K. **Collaborative Organizational Processes**

Effective principals have a management style which is consultative, participatory and cooperative. They help their staff to grow as professionals and serve as instructional leaders and teaching models. School staff support the principal because of the constant support by the principal for excellence in academic and school support services.

L. **A Coordinated, Tightly Aligned Curriculum**

The curriculum is coordinated. Objectives, materials, instructional methods and assessments are tightly aligned. One textbook series is used from grades 1-12. Teachers from lower elementary, upper elementary, junior high/middle schools and high school levels meet as a group to develop common objectives and to recommend assessment measures. The teacher's function is to assure that the agreed on levels of mastery are met; deviations are not tolerated. The principal's function is to be knowledgeable of current trends in curriculum and instruction and to communicate these trends to the professional staff. Further, the principal spends more time controlling and coordinating instruction and less time managing the physical plant. The principal's role is more consultative than judgmental, to help teachers excel in the classroom rather than to simply eliminate a teacher not performing up to expectations. The principal uses test results to guide educational planning for the grades under his or her supervision.

Richard Polansky
Central Clinton
board secretary

There is always a new and better solution to education's problems! Unpublicized excellence exists in many forms. Educational programs need modern, challenging goals — for which we all strive!

M. **A Strong Sense of Community**

Effective schools are characterized by a strong sense of community. Teachers, students, parents and administrators feel involved with one another. Collaboration is espoused — shared decisions and open communications exist at all levels. Collegial planning and constructive conflict resolution are the cornerstones of this system of education.

N. **Time on Task**

Academics are highly valued, extracurricular activities have a supplementary role as a reward system for achievement in academics and specific objectives are developed to achieve specific outcomes. Class time is protected — late starts, early dismissals and unexcused absences are not tolerated. More work is expected and done in class and more material is covered in greater detail. Many of the researchers suggest a longer school day and/or a longer school year. At a minimum, the expectation is that the use of the present school day become more efficient and effective.

O. **Budgeting Discretion at the Building Level**

Building administrators, in collaboration with the professional staff, have the ability to allocate resources in the most productive way to meet district and building goals. In many areas the establishment of building and instructional needs and priorities is best accomplished at the building level. Budgets for attendance centers are established by the school board; greater autonomy is provided to the attendance center. Obviously, this increased autonomy needs to have a corresponding increase in accountability.

Each school's effectiveness seems to represent an intricate, perhaps idiosyncratic process. There is not one effective school model. However, if school officials and professional educators will seriously examine the consistent recommendations of the research, as well as the various education reports that have been made in recent years, significant progress toward the goal of excellence in education can occur in any size district — even under difficult economic circumstances.

The Educational Program

1. Secondary education students should have access to a minimum of 60 curriculum units in order to meet their diverse needs.

Current state law and administrative rules in Iowa require each school district to offer a minimum curriculum of approximately 27 units including:

English-language arts	4 units
Foreign language	2 units
Mathematics	5 units
Occupational Education	5 units
Science	4 units
Social Studies	4 units

Additionally, school districts are required to offer driver education, fine arts, health education and physical education.[30]

The State of Iowa defines one curriculum unit as a course offered for a period equivalent to one school year (36 weeks for at least 200 minutes per week or the equivalent of 120 hours of instruction). Curriculum units are categorized within five subject areas: career-vocational, fine arts, academic, health and physical education and other. Most curriculum units offered in Iowa are either academic or career-vocational. The average number of total curriculum units provided in 1985-86 was 53.74, with 19.38 career-vocational units and 27.92 academic units. Comparisons of schools in different enrollment categories show that there is a wide disparity in the curriculum that is provided to students within the state. School districts with an enrollment of less than 250 pupils provide an average of 38.31 total units, while districts with an enrollment of between 2,500-7,499 provide an average of 88.01 units. Schools with an enrollment of 7,500 or more provide an average of 148.67 units.[31]

In other words, school districts with an enrollment of 2,500 to 7,499 provide two and one-half times as many career-vocational units and twice as many academic and fine arts units as school districts with an enrollment of less than 250. Comparisons of types of academic courses provided show similar results. Schools with enrollments of less than 250 provide two-thirds as many math units, two-fifths as many English units, half as many science units and three-fifths as many social studies units as do schools with an enrollment of 2,500 to 7,499. Those same schools provide one-fifth as many foreign language units.[32]

It should be noted that the Department of Education currently collects information from Iowa school districts about the number of curriculum units provided. A school district which provides its students with access to additional courses through sharing agreements or other contractual arrangements would not report those units to the department. We believe that the department should also collect information about curriculum units based on student access, i.e. data about schools which provide access to curriculum, but which do not directly provide the program should be collected. This would enable comparisons of curriculum in different sized school districts to more accurately reflect current practices.

We believe that the recommendation for access to 60 curriculum units is justifiable for the following reasons:

a. It is only slightly higher than the average number of units currently provided by Iowa schools.
b. The data understates the current access to curriculum units, because it does not take into account the units offered through sharing arrangements and units available through the utilization of technology.
c. In order to serve their diverse needs, students should have an opportunity to choose from a variety of courses beyond the "core" curriculum mandated by state rules.

We also believe that school districts should not solve the problem of student access to curriculum by offering certain courses in alternating years. Students should have the opportunity to take sequential courses every year. School districts which use this practice limit the choices available to students and limit the opportunities for students to pursue an accelerated education.

Bob Soloth
Iowa Farm
Bureau Federation

I think there are several good ideas in the report, if they are implemented, that can improve education for students in Iowa. There are several ideas in the report that would increase efficiencies for school districts, which will help hold down educational costs.

Further, we believe that the curriculum which is accessible to students should address the following subject matter: reading, writing, mathematics, reasoning, speaking, listening, science, social science, career exploration, comprehensive health education, foreign language, the fine arts, physical education and computer literacy. While it is not our desire to delineate the specific curriculum which each school district should provide, we believe that the secondary school curriculum should be sufficiently broad to meet the diverse needs of the students in Iowa. We commend the other education reports which have been released in recent years for a more thorough review of matters relating to the content of the curriculum.

2. Students should have access to educational programs which utilize current technology.

We make the following recommendations to school officials concerning the productive use of technology in education:

a. Iowa students should be provided with regular access to instruction which utilizes computers. The National Task Force on Educational Technology has suggested that a reasonable goal would be to have a pupil/computer ratio of ten to one. Currently the average ratio of students for each computer in Iowa is about 30:1[13]; nationally, the ratio is about 40:1.[14]
b. Computers should be primarily utilized in clusters, rather than scattered throughout the school. Clusters can be placed either in computer labs or in classrooms. It is recommended that the ratio of pupils to computers in an instructional setting be two to one and no more than three to one. District planning for the use of technology should determine how computers are used and in what setting they are appropriately located.
c. Students should have access to school computers which can be used at home or at school during the evenings and on weekends.
d. Iowa students should have access to alternative sources of information which are accessible via technological tools, including national computer networks and libraries on laserdisc.
e. Iowa students should have access to instructional programs originating from outside the attendance center. Examples include: instructional programs available via satellite, microwave, or cable transmission. Distance learning alternatives should be supplemented with instruction at the local or regional level and should provide opportunities for interaction with the education professional at the point of origin. School officials may wish to consider the establishment of regional meetings at which students and teachers participating in distance learning programs can interact.
f. Technological tools should be used by instructors at the local level to establish and implement plans for individualized instruction for Iowa students.

Dr. Barry Stelm
Committee consultant

I believe the Strategies for Excellence report is unique in that it provides bold leadership in bridging the gap between effective schools research and application through self-determination at the local decisionmaking level.

Schools Using Technology in Education

Technology is already changing the face of Iowa's educational delivery system, through satellite courses and telecommunication networks.

Five districts currently participate in the TI IN Network, a system which transmits telecourses from Texas via a satellite downlink. Participating schools include Dumont, Murray, Prescott, Colo and Wellsburg. A downlink captures the signals that have enabled several districts to expand their course offerings. In its first year, for instance, Dumont High School expanded its curriculum by 15 courses. Key in the system is the capability for students to communicate with instructors via a two-way audio system which enables them to ask questions, receive questions and discuss issues with their peers. The system also offers staff development activities.

Interactive satellite instruction isn't the only technology augmenting Iowa schools. Kirkwood Community College operates a microwave network serving seven remote sites. Students can watch the teacher, and the teacher can also see the students. The system enables students at each site to hear see all questions and answers.

In western Iowa, West Bend and Mallard schools use a variety of technology, including an interactive cable television course system that has been in opcration since 1982. School officials have found the program effective, reliable and able to considerably expand the two schools' course offerings. Nearly 60 students participated in the cable television classes in the 1986-87 school year.

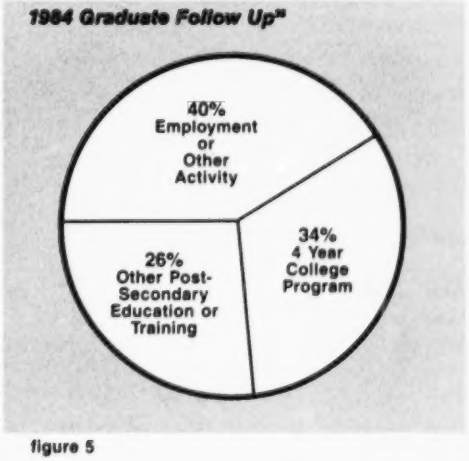

1984 Graduate Follow Up*
40% Employment or Other Activity
34% 4 Year College Program
26% Other Post-Secondary Education or Training

figure 5

3. Students at the secondary level should have access to an educational program which is suited to pursuits following high school graduation.

The committee has noted previously that the school program cannot, and should not, be uniformly established for all students. Our children have diverse abilities and needs. Some of our students will pursue additional education and training following high school, either academic or vocational. But school officials must also recognize that a significant portion of the student population will enter the job market immediately upon graduation (see fig. 5).

We specifically discussed the question of how schools should address the needs of its entire student population and how the response to those needs should be integrated with state and national policies for economic development. Attention was focused on three general categories of students: students who are college bound; students who will seek post-secondary training other than a liberal arts program at a college or university and students who will enter the labor market immediately upon graduation.

While we do not address the specific content of curriculum areas, we feel it is necessary to go into greater detail about the school's role in preparing students for the workplace. We do so, because it has significant implications for the methods of delivering the education and for what agencies are best suited for providing this kind of education.

What Business is Telling Schools

The recommendations of the various reports on education and employment were reviewed. Included were the recommendations of the Education and Industry Subcommittee in the 1984 Iowa report *First In the Nation in Education* (FINE) and the recent report by the National Alliance of Business (NAB), *Employment Policies: Looking to the Year 2000*. Some comments and recommendations from NAB are noted below:

About the changing workplace

"Changes in the nature of existing jobs or creation of new jobs will likely require higher levels of skills. Young workers . . . and others seeking entry level jobs will therefore face more intense competition for fewer unskilled and semiskilled jobs."

"By 1990, an estimated three out of four jobs will require some education or technical training beyond high school. (The number of jobs requiring college degrees is not expected to change significantly.)"

"Computer skill will comprise only a small part of total skill requirements, but basic academic skills, problem solving and interpersonal skills will be increasingly important."

About expectations of the workforce

"Companies will find that basic skill deficiencies (reading, writing, speaking/listening, math) of employees will add to their costs not only through greater remediation expenses, but also through lower productivity, higher supervisory time and poorer product quality."

About implications for productivity

"School systems must stress basic reading, writing and arithmetic skills and the development of problem solving, communicating and teamwork skills. Moreover, they must develop programs that encourage youth to stay in school."

"Programs to improve the effectiveness of schools cannot sacrifice or lose large segments of young people by concentrating their efforts on serving 'the best and the brightest' and ignoring problem students. With the total number of new entrants in the workforce declining, business will need to rely on all youth, not just certain segments."

"Business, public training institutions, school systems, private training institutions and labor must work in partnership to ensure minimal duplication in the provision of training. Each has important roles to play."

About education's role in preparing the workforce

"The education system has responsibility not only for developing basic skills but also for providing greater student awareness of the workplace and career choices."

"Efforts to improve the quality of academic education in the schools is essential and must be continued, but care should also be taken not to ignore the importance of building greater student understanding of the workplace. School curricula should begin in elementary school to relate basic academic knowledge to the working world. Beginning at the junior high and middle level schools, much greater emphasis on information about work is needed. It is an ideal time to provide counseling and special courses that can relate a student's interests, aptitudes and skills to the labor market."

"By high school, students should also have the opportunity to gain actual work experience through cooperative education or other work study programs. For those students who will be entering the job market immediately after high school, schools should arrange for students to receive accurate and complete labor market information. Public employment services should work actively with the schools to make this information available."

General Recommendations

- Secondary students should have opportunities to assess their skills and to consider career and training options. Students at the elementary level should also have opportunities to assess and discuss options which will face them later in their lives.
- Iowa students should have access to an educational program which prepares them to deal with change throughout their lives.
- Students should be provided with information about current employment trends.

- Students should have access to programs in each of three education paths: college bound, other post-secondary training and entry into the labor market. Students must have the opportunity for lateral movement between these alternate paths, sufficient guidance and support services should be provided and, when appropriate, students following different paths should be integrated in classes covering the same subject matter.
- School districts should move away from the practice of providing job-specific training to Iowa students. A priority should be placed on providing programs in the basic skills. Vocational education programs should be limited to career exploration opportunities. If school officials choose to provide job-specific training, it should be in addition to, not in place of education in the basic skills.

College Bound Students

- Students who plan to attend college upon graduation from high school should have access to an educational program which will adequately prepare them for college level work and which will prevent the need for remediation once the students enter the post-secondary program.
- College bound students should have the opportunity to experience college level work while attending high school, if the students are able to complete the regular course work of the high school. College level work should be counted as credit toward high school graduation.
- Preparation for the College Level Examination Program should be integrated into the secondary curriculum for students who plan to attend college after graduation.
- College bound students should have the opportunity to participate in accelerated programs which may lead to early graduation from high school.

Harlan Students Get College Credit

Harlan Community High School operates an innovative program which enables high school seniors to earn transferrable college credits from Iowa Western Community College.

John Rawlings, High School Principal, says the program has been highly successful and continues to be used by Harlan High School seniors. As one example, he cites one student who was able to waive almost a full year of studies at Drake University through the credits she earned at Harlan High School, at considerable savings.

The idea initially grew out of the realization that several of the high school teachers had endorsements for teaching at post-secondary levels. An agreement was reached with Iowa Western on a curriculum of college English, chemistry and math. Students pay for book and lab fees while the school district pays tuition costs. Rawlings says experience has shown that the college credits are accepted at other institutions of higher learning.

Students Bound For Other Post-secondary Training

- Students who plan to continue their education in vocational or technical areas should have access to an educational program which prepares them for entry into post-secondary vocational training programs.
- Non-college bound students should have the opportunity to receive post-secondary level training while attending high school. Post-secondary level vocational training should be counted as credit toward high school graduation. Students who participate in post-secondary training should be expected to meet other graduation requirements which are established.
- Non-college bound students should have the opportunity to participate in accelerated programs which may lead to early graduation from high school.

Students Entering the Labor Market

- Students who plan to seek full-time employment immediately upon graduation should have access to an educational program which prepares them for the work experience.

Dr. Bill M. Clark
AEA administrator

The report offers school boards and educators several goals to pursue which would enhance the quality of education in Iowa. In addition, the document is an excellent resource of information on specific dimensions of Iowa schools.

- Students planning to enter the workforce after high school should have work experience opportunities prior to graduation.
- Students planning to enter the workforce after high school should be prepared for re-entry into the education system later in life.

4. Kindergarten students should be enrolled in a program which is scheduled for a majority of the school day, every day of the school week.

In the 1974-75 school year, 69% of Iowa's school districts provided kindergarten on half-day, every day basis for both semesters. Seventeen percent provided all day, every day programs and 13% provided all day, alternate day programs; each program covered both semesters. In 1986-87, the percentage of districts which provide kindergarten on a half-day, every day basis is 28%, a decline of 57%. Conversely, the percentage of districts which provide all day, every day programs increased to 25%, and the percentage of districts which provide all day, alternate day programs increased to 20%. The remaining 27% of the school districts provide some other type of kindergarten program. Clearly, the trend in Iowa school districts is toward all day programs as opposed to half-day programs.[36]

The literature concerning the effectiveness of various types of kindergarten programs was reviewed. It is our opinion, based on that review, that the most educationally beneficial kindergarten program type is a full-day, every day program.

5. Iowa students should have access to an optional education program, including: programs for the talented and gifted, dropout or dropout prevention programs, state and federal programs for students with special needs, other optional programs and choices in education.

Programs for the Talented and Gifted

In 1985-86, 188 school districts were granted additional allowable growth to provide funding for talented and gifted programs.[37] These funds are entirely made up of local property tax dollars. The amount of allowable growth which a school district may receive cannot exceed three percent of the regular program budget in the school district. Costs in excess of that amount must be paid for with dollars from a school district's general fund.

Additionally, some school districts currently provide a talented and gifted program, but have not applied for additional allowable growth. It is not currently known how many school districts fall into this category.

The Department of Education estimates that the number of talented and gifted programs has increased significantly in recent years. In 1986-87, 195 school districts have talented and gifted programs which have been approved by the Department of Education and are receiving additional allowable growth for the programs. These programs serve 8,589 pupils and have budgets totaling $7.7 million statewide. Twenty-five percent of the participating districts have an enrollment of less than 400; 9% have an enrollment of less than 250.[38]

We recognize that Iowa school officials may be reluctant to raise property taxes to fund talented and gifted programs. However, we believe that local districts should take whatever action is necessary to initiate TAG programs.

Dropout or Dropout Prevention Programs

Iowa's dropout rate is on the rise. For the second consecutive year, the dropout rate has increased, up from 2.04% in 1982-83 to 2.28% in 1984-85.[39]

Dropout Rate By Enrollment Category[42]
Percentage

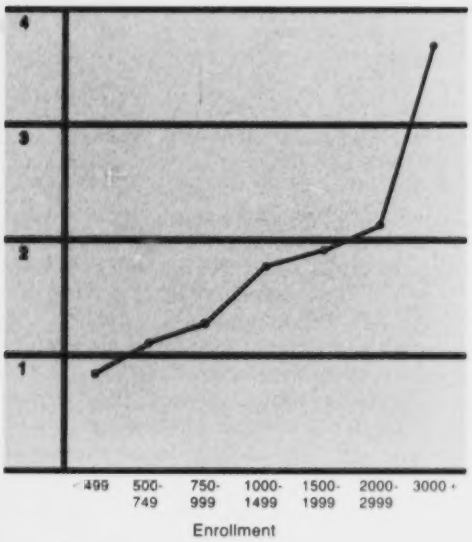


figure 6

In 1986-87, 13 school districts were granted additional allowable growth for dropout and dropout prevention programs. The amount of allowable growth which a school district may receive for these programs cannot exceed 5% of a school district's regular program budget. Costs in excess of that amount must be paid for with dollars from a school district's general fund. A total of $6,165,489 will be expended by those 13 districts. Of that amount, $2,113,937 is funded by the additional allowable growth.[40]

Only one school district with an enrollment of less than 600 has received allowable growth for a dropout program. Eleven of the participating districts have an enrollment greater than 2,500.

Some school districts currently provide dropout and dropout prevention programs, but have not applied for additional allowable growth. It is not currently known how many school districts fall into this category. However, 49 education programs provided by school districts are specifically designed to serve dropouts or potential dropouts.

Thirty-six school districts are listed by the Department of Education in the State Directory of Alternative Schools and Programs. Only 2% of those districts listed have an enrollment of less than 1,000. Forty-two percent of those districts have an enrollment between 1,000 and 2,499, and 52% are districts with an enrollment of 2,500 or more.[41]

While the directory may not include all of the districts which provide an alternative program, it appears that many students in districts with an enrollment of less than 1,000 do not have access to an alternative program.

We recognize that there is a higher dropout rate as the size of the school increases. However, schools of all sizes have students who drop out. While the dropout rate in larger school districts is statistically more significant, it does not mean that only the larger school districts have a responsibility to address this concern. All schools should provide access to programs for dropouts and potential dropouts (see fig. 6).

Dropout Programs Help Kids "Drop In"

Drop out rates have been of concern to educators for many years. Statisticians estimate that nationally, 25 percent of the students in the "class of '99" will not graduate from high school.

Iowa schools are addressing the problem, however, through programs like that operated in cooperation with Kirkwood Community College in nine sites in Merged Area 10. Dropout rates are a problem in all sizes of districts, and four schools, HLV, BGM, Iowa Valley and Belle Plaine, have banded together in what they call the Hartwick Consortium, one of the sites served by Kirkwood. College Community Schools in Cedar Rapids also operates a Kirkwood-aided program.

In each, schedules vary from one-half to five- and one-half hours per day. Scheduling is even more flexible in the College Community program, which offers both day and evening courses. The programs are aimed at high school aged students. Goals of the programs include offering transition into the regular school program and ensuring that students complete high school.

State and Federal Programs for Students With Special Needs

There are many students in Iowa with special needs who have been identified by the state or federal government. Examples include students with limited English proficiency and non-handicapped students with learning problems who require remedial assistance.

School districts currently provide a variety of programs which serve these special needs students. In 1985-86, 2,091 Iowa students were served by an English as a Second Language program, or a Transitional Bilingual Education program.[43] Funding for these programs is derived primarily from local sources. As noted earlier in this report, some limited funding is available from the state and some federal funds are available, primarily through Title VII of the Elementary and Secondary Education Act. School districts throughout Iowa have done a good job in this area, in spite of limited assistance from the state and federal governments. School districts should continue these efforts.

Non-handicapped children who require remedial assistance are also being served in Iowa schools. Funding for programs which serve these children is primarily provided by the federal government under Chapter 1. However, there is evidence that some children are either unserved or underserved by these programs. The Iowa Department of Education in recent years has more strictly defined a learning disability under the Iowa special education law. This action was taken because it was believed that children requiring remedial assistance were being incorrectly identified as learning disabled, ostensibly for the purpose of receiving additional funds through the special education weighting for learning disabilities. Restricting the identification of children with learning disabilities has not reduced the number of children requiring remedial assistance.

Regardless of the availablity of funding for these programs, school districts have a responsiblity to establish a systematic procedure for identifying students who require remedial assistance and to provide those students with the help they need.

Other Optional Programs

There are many students in Iowa who do not fall into any previously defined category for which special programs have been established. Iowa schools have a responsibility to establish procedures to identify special needs of students who may not fit into any category identified by the state or federal government and to provide appropriate assistance to those students. Efforts should be made to address the needs of those students. Programs which schools may wish to consider include:

- Special preference programs focused on career or cultural interests for students who are not identified as being talented and gifted.
- Programs which allow the study of subject matter not covered by the regular school curriculum.
- Programs which provide opportunities for learning outside of the traditional school setting.

Choices in Education

In addition to the alternatives listed above, school districts should provide parents and students with opportunities to make choices about the content of the educational program and the setting in which the program is provided. Where choices are limited within the program offered by a school district, school officials should make sincere efforts to explore other options for providing access to programs and services. Procedures should be established which will allow school officials to plan for these options, to assure compliance with the educational standards established by the district and to articulate those options with other elements of the educational program.

Accurate data about the accessiblity of alternative or optional educational programming, other than for dropouts, is not currently available. However, our review of the recommendations of the various state and national task forces, as well as the literature on alternative and optional education, leads us to conclude that the issue of student and parent choice is a matter which requires serious attention on the part of local school officials.

Above and beyond the need to respond to the political issue of parent and student choice, school officials should view expanded choices as an opportunity to provide students with instruction which addresses the educational needs of individual students and to increase the involvement of parents in the education of their children.

6. *Each child should have access to an optional pre-kindergarten program.*

Pre-kindergarten programs for handicapped children are mandated by state law and funded by supplementary weightings established by the School Budget Review Committee. However, pre-kindergarten programs for non-handicapped children are not mandated by state law. No statewide data is currently available about how many school districts offer such programs. It is believed that only a few school districts currently offer such programs.

We recognize that this recommendation is currently beyond the means of Iowa school districts. However, in the absence of additional funding, school officials should explore ways in which these programs can be provided. In the absence of additional funding, we believe that it is appropriate for these programs to be self-supporting; i.e. schools should establish fees which cover the cost of providing the program for those parents who choose to enroll their children.

In our review of research about kindergarten and pre-kindergarten programs, we found that there is strong evidence that early childhood education results in higher levels of achievement as compared with the achievement of children who do not receive such services. Further, we believe that concerns about the negative effects that early education may have on the social development of children have been overstated. Early childhood education does not mean that students would be "pressured" to succeed. It should be recognized that the purpose of early childhood education is to provide children with opportunities for educational progress prior to enrollment in kindergarten, not to produce masses of child prodigies. If participation in the programs is optional, concerns about these programs should be alleviated.

Lannie Miller
West Bend board member

There is a wide disparity in education across the state. The report has flexibility in it, but it will cause school boards to take a hard look at their school districts, put traditional concerns aside, and work for the best education possible for students.

Pre-Kindergarten Programs

South Tama Community School District is among the 30 Iowa school districts which provide a pre-kindergarten education program. In 1985, the district changed its kindergarten program from five half days to three full days. The pre-kindergarten program was added for two full days each week. All four-year olds in the district are eligible to participate.

The program received an Award for Excellence in Curriculum with Distinction from the Iowa Association For Supervision and Curriculum Development in the fall of 1986. A unique feature of the program was the manner in which the staff was trained to provide the program. A cooperative agreement was made with Central College in Pella to establish a training extension program for kindergarten teachers in the pre-kindergarten program. The college also assisted with the development of the preschool curriculum.

The Fort Dodge School District established a pre-kindergarten program in the 1985-86 school year. The program served 60 students with a maximum class size of 15 students for each teacher. Entrance into the program was based on a school readiness screening test.

Followup interviews with kindergarten teachers indicated that the program reduced the differences between kindergarten students which had existed prior to the start of the pre-kindergarten program. Another benefit of the program cited by the district is the involvement of the parents of children enrolled in the program. Monthly parent meetings have focused on child development topics, effective parenting behaviors, and the development of learning materials for home use.

Funding for the programs was partially provided by additional allowable growth for a school improvement project, which was approved by the Department of Education.

7. Each child should have access to a child care program.

Statewide information about the availability of child care programs in Iowa schools is not currently available. Some school districts have applied for child care grants from the Department of Human Services for start up costs.

School districts are well suited to fill the unmet needs of Iowans for child care. Schools whose students do not have access to child care from other agencies should provide these services. While we recognize that schools have been burdened with many tasks other than providing an education to Iowa's children, often without additional funds to accompany those duties, school officials have a responsibility to assess any needs which their communities may have and provide services to the extent possible. In the absence of additional revenue, it is appropriate for child care programs to be self-supporting; i.e. schools should establish fees which cover the cost of providing the program for those parents who choose to enroll their children. School officials should consider making application to the Department of Human Services for a child care grant. It may be appropriate to utilize funding available for community education to cover the additional cost. In our judgment, child care programs should be viewed as a community education program.

Child Care in the Public School

The growing number of families with working parents is an aspect of contemporary living that is changing the way schools relate to their communities.

College Community Schools near Cedar Rapids is one Iowa school district that has addressed the problem by setting up a program which addresses day care, preschool and before and after-school care for children of the district's citizens. Begun in 1985, the program has not only served the students, but has also resulted in early parent involvement with the schools and interaction with grandparents, often a hard-to-reach segment of the community. The program, originally begun in response to teacher petitions for care for their own children, has also helped build employee morale. Not only that, but the program pays its own way.

Said Superintendent William Bach in a 1985 *Education USA* interview, "If you can do any part of this program, you can do it all."

8. *Each student should have access to a comprehensive health education program.*

School districts are currently required to provide health education to their students, but the content and breadth of these programs vary throughout Iowa. In 1979, the Task Force on Comprehensive School Health Education made several observations and recommendations about health education in Iowa. We commend this report for review by school officials. While we do not wish to make specific recommendations about curriculum content and we do not support legislation which would mandate comprehensive health education without additional funding, we believe that the concepts embodied in the 1979 report should be a part of the Productive School Model. School districts should examine their health education programs in light of the recommendations that have been made.

A comprehensive health education program should include programs for substance abuse prevention and the prevention of birth defects, sex education programs to educate students about the dangers of AIDS and other communicable diseases and programs designed to combat teenage pregnancy.

9. *Iowa students should have access to academic and athletic extracurricular activities.*

We believe that extracurricular activities are an integral and vital part of a broad educational program which meets the diverse needs of Iowa's students. Extracurricular programs should include a variety of academic activities, in addition to interscholastic athletic competitions. For example, all Iowa students should have access to extracurricular music and speech activities, as well as academic competitions, such as the Academic Decathlon.

During our deliberations, we had hoped to review information which was being collected by the Department of Education about extracurricular programs. This is the first time the department has collected this information. However, the information was not available prior to the time that this study was completed. We hope that school officials will examine this information when it is available and make a comparison between the extracurricular program which they provide and the programs which are provided by other Iowa schools.

10. Each citizen should have access to a community education program.

Community education in Iowa cannot be identified as a specific program. Rather, it is a philosophy which promotes the idea that the school and the community should interact to meet the needs of the community in addition to providing an education for school-aged children. Community education also extends beyond the notion of making school facilities, such as the high school gym, available for use by adults. It entails a process by which the unmet needs of the community are assessed and programs are developed which address those needs. The entire breadth of community activity is encompassed in the philosophy of community education, including day care programs, various social and cultural activities, recreation programs and vocational and academic training for adults. Practically, any program designed to serve the needs of the community can be included.

Disparity also exists in Iowa schools with respect to community education programs. Of the 20 community education sites specifically identified by the Department of Education, 65% were in districts with an enrollment of 1,000 or more.[44] School districts should consider the possibility of funding these programs by utilizing the playground tax, which can be used for community education.

Many school districts in Iowa make their facilities available for use by the community. But community education involves much more than opening the school buildings to the community during non-school hours. Each school district should actively assess the needs of its community, aggressively establish community education programs to meet those needs and use available sources of funds to pay for those programs. The jurisdiction over community services is not limited to the city council; schools also have an important role to play. As the population of Iowa grows older, it is vital that schools cultivate the support of the community. It has been estimated that 75% to 80% of Iowa's population do not have children in school.

Academic Extracurricular Programs

The Denison School District established an innovative way to emphasize the importance of academic extracurricular activities. The Academic Extracurricular Project, which began in the 1985-86 school year, includes a mentor program for talented and gifted students, the Academic Decathlon, a Mock Trial program and a Future Problem Solving Team.

Rather than employing a single person to coordinate all of the academic extracurricular activities, the district issues extra duty contracts to several district instructors to implement the individual program, similar to extra duty contracts for athletic coaching. Faculty members who serve as mentors in the talented and gifted program receive no compensation.

Superintendent John Finnessy cites three major benefits to the project: it demonstrates to the public that academics are an important part of the school program; in some ways the academic day is extended; and it provides recognition and motivation for the school's faculty. He believes that the program could be successfully implemented in other Iowa school districts.

Each school district should implement a systematic, schoolwide, student progress assessment program. The program should include the following components.

a. Performance objectives for the school district, as well as for individual students. The objectives should be "terminal," i.e. they should be based on the goals for what students should have learned at the conclusion of an educational unit.
b. Frequent assessment of student progress based on the results of standardized and criterion referenced tests.
c. Adjustment to the educational program to meet the needs of individual students.
d. Integration of the school counseling program with the assessment program.

Teachers should be assigned the responsibility of assessing the progress of each student. Adequate support services for teachers should be provided.

12. Iowa school districts should annually report to the public the districtwide results of a standardized test administered to assess the progress of the students in the district. The report should include: a comparison of the results with the national norms for the test, a comparison of the results with the Iowa norms and a comparison of the results with the performance of district students in previous years.

We do not recommend that a uniform, statewide standardized test be established. Rather, schools should choose their own measurement tools and report the results of those assessments. The results should be based on the entire school population. Students should not be excluded from the measurement, nor the report of results, because of the expectation of a low level of performance.

We recognize the limitations of standardized tests and that norm referenced tests have the potential for misunderstanding. However, professional educators should have the ability to explain test results. In our view, it is better to openly discuss and explain test results with the public than to only use the results internally, or not use them at all.

13. Each school district should actively comply with the needs assessment and goal setting requirements in Section 280.12 of the Code.

Activities should minimally include an annual progress report about the attainment of goals previously established by the district, an annual report to the board by the district advisory committee, periodic opportunities for community input and a periodic review of demographic information about the district.

School officials should adequately and actively evaluate and assess their progress compared to self imposed goals. Planning and evaluation is an essential element in the success of any school district endeavor. Iowa schools should not leave educational planning to chance.

14. Pupil/teacher ratios should be maintained at a level which provides sufficient support for the educational program and which will provide students with a challenging educational environment.

We have examined the research on the relationship between student/teacher ratios and student achievement. We find no conclusive evidence that low pupil/teacher ratios results in higher student achievement. At most, we can give qualified support for a lower pupil/teacher ratio in the lower elementary grades (K-3).

Further, pupil/teacher ratios can be too low. In some cases, it is beneficial to have a larger pupil/teacher ratio, because it can provide greater competition among students and more opportunities to interact with peers who have varied backgrounds, experiences and interests.

We conclude that a low pupil/teacher ratio is not an essential element of an effective school and the Productive School Model in particular. From a financial standpoint, a low pupil/teacher ratio can be a hindrance to achieving the Productive School Model.

Dan Roe
Davis County superintendent

School districts which do not acknowledge the need for changes face a possible alternative of having legislative mandates placed upon them — an alternative not consistent with our belief in local control.

Human Resources in Education

We have reviewed the most current information about staffing practices in Iowa schools. In addition to this review, we also examined several major education reports which have been issued since 1983, when the report, *A Nation at Risk* was released. Considerable attention was given to the recent report of the Carnegie Forum, *A Nation Prepared: Teachers for the 21st Century*.

Within the context of the elements of that report which are within the jurisdiction of local school officials, the following discussion and recommendations are divided into three sections: Administrative Functions, Teaching Functions and Educational Support Functions.

The Committee on Strategies for Excellence has looked to the recommendations of the Carnegie Forum for guidance. Given the current legal and financial constraints which govern the operation of Iowa schools, we do not endorse all of the recommendations of the Carnegie Forum. However, we have attempted to incorporate the principles of the Carnegie report, including some specific suggestions, into several elements of the Productive School Model.

Administrative Functions

One of the most frequently criticized educational expenditures in recent years has been the cost of school administration. In 1986, legislation was enacted which limited expenditures for executive administration to 5% of a school district's operating budget. The argument has often been heard that there are too many school administrators, expenditures for administration are too high and that teachers are being laid off while school administrators are keeping their jobs.

We specifically addressed these issues, as well as the issues of administrator pay, administrator longevity and responsibilities of school administration. The results of our review lead to mixed conclusions, which school board members must evaluate, based on local conditions.

1. Sufficient administrative staff should be employed, or administrative services should be acquired to assure that all administrative tasks are performed effectively.

Administrators should have sufficient time to perform administrative functions. As we have pointed out earlier, it is not enough to have what appears to be an adequate number of administrators, or an acceptable teacher/administrator ratio; they must be afforded enough time and provided with enough support to make sure that no task is neglected. To that end, we have included recommendations for limited supplemental duties and adequate administrative support staff, which are discussed in more detail later in this section.

We do not intend to imply that these functions must be performed via traditional administrative structures, i.e. superintendent, assistant superintendent, staff specialists, principals and assistant principals. We do mean that individuals, wherever they may be located in a district's organizational structure, be given these responsibilities and be held accountable for their performance.

The operation of a school district is complex and involves many tasks and activities. The administrative functions listed below need to be performed effectively. While this list may not be all-inclusive, we believe that it is representative of the breadth of responsibilities which Iowa school administrators are expected to perform.

Communications/Public Information

Each school district should implement an external communications program to provide information to the public about school programs and services. The program should include the following components: a system for direct communication with residents of the school district; strategies for school/media relations; interaction and cooperation with community institutions including human service organizations, other political entities, locally elected state officials and business and industry; management of information received by the district from external sources, including educational research and communications from other education organizations.

Planning and Research

Each school district should implement a systematic program and plan for needs assessment and district planning, including the assessment of current education research with respect to practices in the district. The program should include the following components: the establishment and review of district goals and needs, periodic review and revision of school district policies, compliance with state planning requirements under Section 280.12 of the *Code*, review and analysis of district demographic data and trends, administration and reporting of standardized and outcome based measures of student progress and performance, investigation of cooperative arrangements with other state and community based agencies and coordination of activities of district advisory committees.

Financial Management

Each school district should implement a systematic program for budget development and implementation and fiscal planning. The program should include the following components: cash flow management, investment strategies, budget preparation, compliance with accounting, reporting and audit requirements established by the state and federal government, internal accounting and auditing, purchasing, grant application and administration, payroll, benefit and claims management and risk management and insurance.

Human Resource Management

Each school district should implement a comprehensive program for human resource management. The program should include the following components: accurate job descriptions; strategies for the recruitment of qualified personnel; compliance with state and federal requirements for equal opportunity; contract administration and compliance with due process requirements; negotiations with employee bargaining units; assignment of employee duties; strategies for retaining high quality personnel; opportunities for employee input concerning school policy and operations; staff development strategies and programs; regular, periodic and meaningful evaluation of all employees; induction of beginning professional educators; strategies for assisting employees who require improvement; alternative strategies for utilizing human resources such as volunteer programs and the use of instructional aides; retraining programs for current teachers in subject areas where teacher shortages have occurred; development of programs for teacher inservice and credit approved for advancement on salary schedules which are specifically associated with district educational needs based on board policy and activities for health cost containment.

Instructional Services

Each school district should implement a comprehensive program for instructional services which addresses the educational needs of the children served by the district. The program should include the following components: develop, coordinate and evaluate the school curriculum; implement state and local programs for students with special needs; select instructional materials; utilize educational services available from other institutions and organizations; promote the delivery of services which meet the needs of individual students; implement specialized student services programs such as guidance and counseling services, health services, diagnostic services; comply with educational and equity standards and requirements established by the state and federal government; develop alternative strategies and programs for educational delivery; develop and implement programs which promote student self-discipline and administer discipline policies; establish and evaluate class schedules and consider alternative scheduling plans for the school day and the school year; integrate current technological tools into the educational delivery system; provide instructional leadership for members of the professional staff; provide training for all administrative and educational support staff; and foster the characteristics of the "effective school" model in each school setting.

Facility and Support Services

Each school district should implement a program which provides appropriate facilities and environment for students and employees and services which allow for the smooth operation of the district's educational program. The program should include the following components: maintenance of buildings and grounds, energy conservation practices, utilization of facilities by the community or other organizations, planning for future facility needs, security services, compliance with facility requirements established by federal, state and local authorities, food and nutrition services, school supplies and equipment; and transportation services.

2. Expenditures for administration, including executive administration, building administration, expenditures for the board of education and all other administrative expenditures, should be established at a level which assures that all administrative functions are performed adequately.

There are considerable differences in administrative expenditures among Iowa school districts. Statewide expenditures for administration were 10.2% of the total budgets in the 1984-85 school year. Generally, the percentage of expenditures decreased as district size increased, as illustrated by the table below.

***Percentage of Administrative Expenses*[44]**

Enrollment	Admin. Exp.(%)*
Up to 250	13.0
250-399	12.3
400-599	12.0
600-999	10.9
1,000-2,499	10.3
2,500-7,499	9.6
7,500+	8.8

*Program expenditures as a percent of total expenditures

***Total Administrative Expenditures per Pupil*[45]**

Enrollment	$ Per Pupil
Up to 250	445.27
250-399	374.57
400-599	351.39
600-999	313.79
1,000-2,499	296.56
2,500-7,499	276.68
7,500+	268.96

***Executive Administration Expenditures per Pupil*[46]**

Enrollment	$ Per Pupil
Up to 250	202.74
250-399	146.83
400-599	114.13
600-999	88.51
1,000-2,499	58.06
2,500-7,499	48.47
7,500+	37.41

There are considerable differences in administrative expenditures among Iowa school districts. Statewide expenditures for administration were 10.2% of the total budgets in the 1984-85 school year. Generally, the percentage of expenditures decreased as district size increased, as illustrated by the table below.

Districts with an enrollment of 600 to 999 spend nearly 30% less per pupil on administration than districts with an enrollment of less than 250. A similar comparison of per pupil expenditures for executive administration shows that districts with an enrollment of less than 250 spend over twice as much as districts with an enrollment between 600 and 999.[46]

Notwithstanding the differences which exist between school districts concerning expenditures for school administration, school officials have maintained administrative costs at a reasonable level. The number of school administrators has been reduced at a greater rate than have other education personnel in recent years. The number of school administrators has been reduced by nearly 23% since the 1977-78 school year. Between the 1980-81 and 1985-86 school years, the average number of instructional staff per administrator has increased from 14.6 to 15. Similarly, the average number of teachers per administrator during that same period increased from 13.4 to 13.82.[47] Claims that administrators are keeping their jobs while teachers are being laid off appear to be unfounded. More than 30% of Iowa's superintendents also serve as a building principal.

If we have a concern, it is about the limited administrative capabilities in many Iowa school districts, because some school districts ask too much of the few administrators they have. Many Iowa school districts need to devote more attention to administrative functions in order to assure that all administrative responsibilities are performed adequately and to assure greater accountability for the quality of the educational program.

3. The number of certificated employees that instructional supervisors are expected to be responsible for should be maintained at a reasonable level.

We recognize that the number of instructional staff members in each district is largely a function of enrollment and that basic administrative functions need to be performed in even the smallest districts. However, the average number of instructional staff per administrator in 1984-85 was 15, while the ratio in districts with an enrollment of less than 400 was 12.1 to 1 (see fig. 7).

To some extent, this information is misleading. We believe that all administrative functions need to be adequately and appropriately performed. It is not enough to have an average number of staff members per administrator while operating with an insufficient number of administrators to perform assigned tasks adequately.

4. Principals should not be assigned supplemental duties which are not directly related to the educational program and to the supervision of teachers in the classroom.

Principals, as instructional supervisors, must have sufficient time to perform their duties. If principals are to be the instructional leaders in each attendance center and if they are expected to adequately perform their responsibilities in the areas of evaluation, curriculum planning, staff development and other educational activities, then they cannot also be asked to perform other time-consuming duties.

5. Superintendents should not serve in dual or multiple roles. Specifically, the positions of superintendent and principal should not be combined.

In the 1985-86 school year 133 school districts employed superintendents who were assigned the duties of the principal.[51] This practice has primarily resulted from the financial constraints that schools have experienced in recent years. The rationale for this action is based on the operational definition of "efficiency" which is used. Those districts which have assigned duties of the principal to the superintendent have done so to reduce administrative costs.

The public and the legislature share some responsibility for this trend. Administrative costs have been an easy target for criticism. The cry for "fewer administrators" has resulted in just that; schools have reduced administrative costs. Evidently, the desire for fewer school administrators has not been satiated, as demonstrated by the legislature's action to limit expenditures for executive administration in 1986.

In our judgment the legislature, the public and school officials have been shortsighted in their criticism of school administration. While these actions may have resulted in lower administrative costs, they have also resulted in lower administrative productivity. The committee does not believe that school administrators who are assigned multiple roles can perform all of their responsibilities effectively. Individuals who serve as the superintendent and the elementary principal cannot physically perform all of the tasks delineated above.

We believe that schools need administrators who are fulfilling all of their responsibilities. In some cases, this may mean we need more administrators. In most cases, it means that expenditures for administration and supervision will not be reduced. The choice is clear — either we succeed in reducing administrative costs, or we succeed in fulfilling the school's mission by employing adequate administrative and supervisory staff. We choose the latter, because it will result in increased productivity and student performance.

Instructional Staff Per Administrator [50]

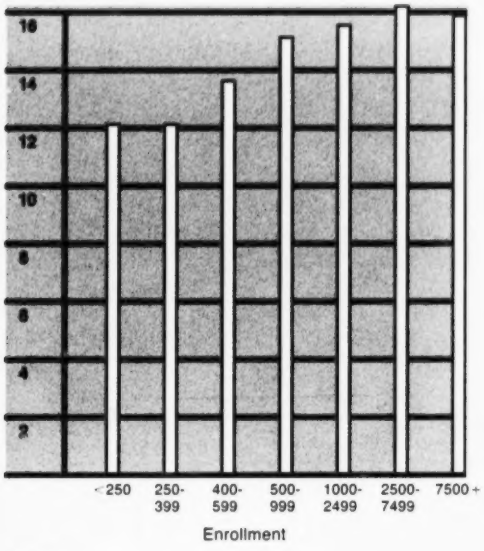


figure 7

6. Specific individuals should be assigned responsibility for all functions at each level of program implementation. District employees should be held strictly accountable for their assigned responsibilities.

There should be no uncertainty about the roles and responsibilities of members of the administrative staff. Effective evaluation of administrative performance must be based on clearly identified responsibilities and job descriptions.

School officials should review the job descriptions of administrative personnel in light of the administrative functions which were discussed earlier in this section. Those job descriptions should be revised to conform with the expectations of the supervisors for each administrative staff person. Similarly, school boards should develop job descriptions and evaluation instruments for the superintendent.

The content of these job descriptions should provide the basis for evaluating the performance of school administrators. Without specific assignments for which administrators are to be held accountable, administrators cannot know what is expected of them and school officials responsible for evaluating the performance of administrative staff members have no basis for making an evaluation. This is an essential component of effective human resource management in the Productive School Model.

7. Administrator salaries should be maintained at a level which will attract and retain qualified and competent executive leadership.

There is a wide disparity in the compensation of school administrators around the state. In 1985-86 the average superintendent's salary for each enrollment category ranged from $33,046 to $58,351. The lowest superintendent's salary was $22,229 and the highest was $69,000. The range of average principal salaries was from $28,856 to $45,519[52]. Included here is a listing of average superintendent and principal salaries for each enrollment category.

***Average Superintendent Salaries*[53]**

Enrollment	Average Salary
Up to 500	$33,046
500-749	$39,797
750-999	$42,864
1,000-1,499	$45,403
1,500-1,999	$47,753
2,000-2,499	$50,759
2,500-3,499	$51,273
3,500+	$58,351

***Average Principal Salaries (high school)*[54]**

Enrollment	Average Salary
Up to 500	$28,856
500-749	$32,668
750-999	$35,661
1,000-1,499	$37,962
1,500-1,999	$40,231
2,000-2,499	$39,573
2,500-3,499	$41,089
3,500+	$45,519

***Average Teacher Salaries in Surrounding States*[55]**

State	Average teacher salary
Illinois	$27,190
Minnesota	$26,970
Wisconsin	$26,800
Missouri	$21,884
Iowa	$21,690
Nebraska	$20,939
South Dakota	$18,095

Teaching Functions

8. Each school district should provide teachers with salaries which are competitive. Compensation plans should include each of the following components, in addition to a generally adequate compensation level for all teachers:

a. a competitive beginning salary

b. performance based criteria for superior work, or additional responsibility or authority

There is considerable disparity in teacher salaries throughout the state. Generally, the disparity in salaries appears to be strongly correlated to the size of the school district. Below are charts which indicate the average beginning salary, the average salary and the average maximum salary, for each enrollment category (see fig. 8).

The average Iowa teacher salary in 1985-86 was $21,690 compared to the national average of $25,313. Iowa ranked 37th in average teacher salary nationally, compared to the previous ranking of 24th in 1977-78 ($13,402).[58]

The average teacher salary in Iowa also ranks below four of the six states which are contiguous to Iowa.

Meanwhile, the average Iowa expenditures per pupil in 1985-86 was $3,568, compared to the national average of $3,637 per pupil. Iowa ranked 23rd nationally in per pupil expenditures in 1985-86.[60]

Iowa teachers should be compensated at a level which is at least equivalent to the national average. Further, school districts should make a concerted effort to raise the salaries of beginning teachers.

School districts should also provide additional compensation for teachers for superior work or for additional responsibility or authority.

We agree with the recommendation of the Carnegie Forum that education professionals should be rewarded for exemplary and productive performance. Further, the concept of rewarding all members of an attendance center for high productivity should be considered. Local school officials should develop proposals for performance based compensation plans which can be considered through the collective bargaining process.

Average Teacher Salary By Enrollment Category 1985-86 [55,56,57]

Dollars
In Thousands

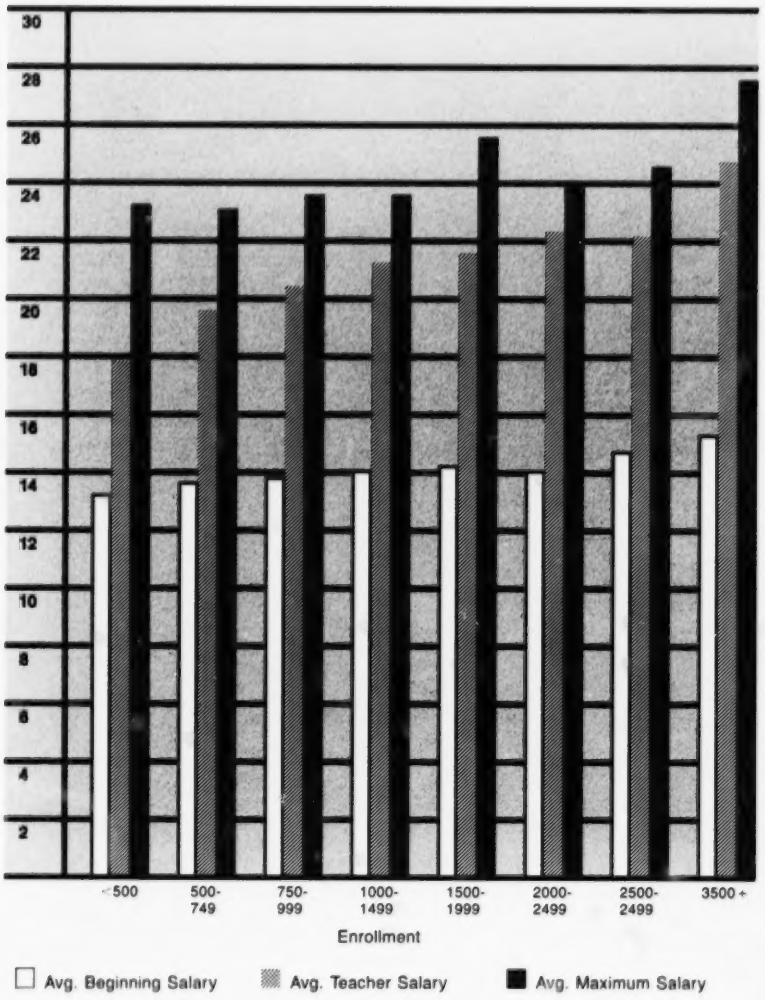


figure 8

9. *Teachers should have a meaningful voice in the decisionmaking process on issues concerning materials, instructional methods, staffing structures, organization of the school day, evaluation and placement of students and the consultants who are used in staff development and curriculum development programs.*

We looked to the recommendations of the Carnegie Forum for guidance about the appropriate roles of teachers as education professionals in the management and operation of the public schools. Implicit in this recommendation is the accompanying recommendation that teachers be

held accountable for their performance and for the use of their additional authority. While we recognize the legal and contractual barriers which make the fulfillment of this recommendation difficult, teachers should be vested with additional responsibility for the quality of education in Iowa. School officials should pursue changes which will accomplish this goal.

10. Teachers should be held accountable for the achievement of students within their classrooms and for the educational achievement of students within the entire attendance center.

In addition to the previous recommendations of the committee concerning school district accountability, we believe that it is necessary to hold teachers accountable for their performance. Each school building should establish performance measurements for attendance rates, dropout rates, job placement and college acceptance, in addition to standardized and criterion referenced achievement tests. The performance measurements should reflect the goals that are established for individual students, the school building and for the district as a whole. Teachers in each education unit should participate in the setting of goals based on those measurements. Teachers should also participate in the development of other measurements of productivity for each education unit.

School officials should establish incentives for educators in each education unit to meet or exceed the goals which are established, including additional compensation for those educators. However, we recognize that performance measures linked to additional compensation for educators have not yet been used extensively in many schools in the nation.

We urge Iowa schools to establish performance-based standards for professional, certificated educators, even though this course of action has rarely been pursued before. We believe that it can be done. Iowa schools can lead the nation in this area.

11. A collegial relationship among teachers and principals should exist within each school building.

We agree with the Carnegie report and other education reports that have been released in recent years, that teachers should not be practicing their profession in the isolation of their classrooms. Each attendance center and school district should expect teachers and instructional leaders to work as a team to improve productivity in Iowa schools and to develop their own methods for establishing this characteristic of an effective school. There are many ways in which this can be accomplished, which will be discussed in more detail in the section on "Strategies."

12. Teachers should be given assignments for which they are most qualified. Conversely, teachers should not be employed in positions for which they are not adequately trained.

Generally, we believe that Iowa schools have done a good job in this area. There are not a large number of teachers who are performing under temporary certificates or who are teaching subjects without proper certification.

However, we do not know how many Iowa teachers are performing outside of their major subject area, or in areas for which they are underqualified. Until more reliable information is available, individual school districts should examine their staff assignments to determine whether they fulfill this goal.

13. Secondary teachers, including teachers in middle schools and junior high schools, should be required to have no more than an average of three preparations per school day.

Generally, the term "preparation," as we refer to it here, means the number of different subject areas for which a teacher must prepare. In our view, teachers who have preparations which exceed this recommendation are placed in a difficult position. While we recognize that some school districts are able to provide a broader curriculum with fewer personnel, too many preparations means that teachers are either not able to do an

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Sioux City superintendent

The Strategies for Excellence Task Force took a fresh and clean approach to their task. The report is based on sound research for effective schools, and the recommendations are realistic and achievable.

adequate job of preparation, or they are relying too much on "canned" curriculum rather than adjusting their lesson plans to meet the individual needs of their students.

In conjunction with this recommendation, we feel that elementary education programs should employ full-time teachers in the areas of art, music and physical education. School officials should not assign these subject areas to teachers who are responsible for the general elementary education program.

If we are to expect teachers to assume more responsibility and to be held accountable for their performance, then we should provide them sufficient time and resources to do their jobs effectively.

14. Assignment of non-instructional duties to teachers should be minimized.

Teachers should be provided with sufficient time to fulfill their responsibilities as professional educators. They should not be expected to supervise study halls, lunch rooms, or perform other activities which detract from their professional responsibilities. Otherwise, we cannot expect them to be held fully accountable for their performance.

However, this recommendation does not mean that teachers should be excluded from performing teaching and coaching functions in conjunction with extracurricular activities. In our judgment, these programs are an integral part of the curriculum and teachers should have responsibilities for them.

15. School districts should prepare and implement a plan which provides special support and assistance to beginning teachers who are inducted into the teaching profession and into the school system. New teachers should be placed where they have the greatest opportunity for success.

While local school officials have little control over programs for the preparation of teachers in colleges and universities, they do have considerable control over one of the most important phases in the development of a quality professional educator — induction into the school system. New graduates from teacher education institutions should not be expected to be able to step into an isolated classroom and perform like a seasoned, veteran teacher. New teachers should be provided with adequate support in the early stages of their careers. Experienced teachers should be reassigned to the more difficult teaching tasks. An induction system should have the following characteristics:

a. It should be based on clearly stated expectations.
b. Recruitment and selection should be an integral part of the induction process.
c. The process should be marked by distinct stages.
d. Opportunities for mutual support among equals should be provided.
e. The process should provide support beyond crisis intervention.

Local school officials have a responsibility to plan for the induction of new teachers into the profession. Induction cannot be left to happenstance. At a minimum, school officials should delegate the responsiblity for induction to specific individuals.

16. Teachers should be regularly evaluated by their principals. In addition, regular opportunities should be provided for peer observation and comment.

After the formal induction phase has been completed, the responsibility to help teachers grow as professionals does not end. Educators should be expected to grow professionally throughout their careers.

The evaluation of teachers should involve much more than a formal evaluation. We believe that the assessment of teacher performance should be a continuous process and be part of a comprehensive plan for professional growth. As we have indicated earlier, we believe that teachers should be involved in the development of that plan.

A recent Iowa Supreme Court decision determined that evaluation criteria is a mandatory subject of bargaining.[61] While this may have complicated the evaluation process, school officials and instructional leaders should view this decision as an opportunity to promote the

establishment of an effective process for the assessment of teacher performance. We believe that teacher participation in the development of this process can contribute to improved instructional practices.

17. Teachers should be provided with meaningful staff development programs.

Staff development programs should be directly related to the educational goals and needs of the district. Funds should be budgeted to assist teachers with continuing education, or to attend meetings outside the district which relate to their duties and responsibilities. Additionally, teachers should have the opportunity to act as staff development leaders and should be provided opportunities to seek retraining in areas of subject matter other than those for which they are currently certificated.

18. Staffing should be organized in a manner which will allow students to be grouped in multiple sections.

Iowa educators have traditionally shied away from "tracking" students based on ability, in order to avoid stigmatizing or placing students in a particular "class." Nevertheless, we believe that this strategy is acceptable under certain circumstances. Schools with multiple sections have more flexibility in the assignment of staff and have more opportunities for teachers of similar subject matter to share experiences and professional expertise. We view multiple section schools as an organizational strategy which can result in positive educational results.

19. Each school district should develop and implement a plan for recruiting qualified education professionals for employment.

We believe that it is not sufficient for a school district to simply choose the most qualified applicant for a professional position on the staff. Rather, each school district should actively seek highly qualified education professionals. School officials should also comply with current laws and regulations concerning equal opportunity employment.

The Educational Environment

Educational Support Functions

1. Educational administrators should be provided with sufficient support staff to allow for concentration on education policy and evaluation.

If superintendents and principals are to have sufficient time to perform their primary tasks as instructional leaders, then other individuals should be employed to carry out their non-instructional responsibilities. We believe that providing school administrators with the time to perform their primary functions will pay long-term dividends in the form of higher student achievement and greater school accountability.

2. Classroom teachers should be provided with sufficient support services to allow for more time to prepare lesson plans, devise alternative learning strategies for individual students and assess the progress of students under their charge.

Support services should include the following components:

- Guidance and counseling services for elementary and secondary students.
- Media and library services, including the preparation of supplemental instructional materials.
- School social services, psychological services and diagnostic services.
- School health services.
- Technology services, including the integration of technology as a tool for delivering instruction.
- Clerical services including printing, copying, word processing, classroom monitoring, lesson correction, etc.
- Other services which relieve teachers of routine instructional and administrative work.

Student Assessment

The concern was one heard often in Sioux City Community Schools — how could teachers make more time to expand instructional activities in the classroom and meet the increasing demand for detailed student progress reports to parents?

After lots of study, the district decided to utilize a computerized student assessment management system called "The Answer." The program covered three broad areas:

Establish a more effective and efficient ongoing math and reading management program,

Relieve professional teaching staff of scoring, recording and day-to-day record keeping to allow for better use of their time, and

Provide a better means of communicating to parents what was happening in the reading and mathematics curriculum.

The program, implemented on a pilot basis in 1985, is now in use in numerous Sioux City Elementary Schools, serving 1,500 students in the 1986 school year. Continual monitoring of students' instructional levels, increased instructional time, evaluation on a lesson-by-lesson basis and program monitoring have all become feasible as a result of the management program.

We concur with the recommendations of the Carnegie Forum concerning support services for teachers. We believe that the most productive use of a teacher's professional talent is to concentrate his or her energies on activities directly related to instruction. Additionally, the committee believes that other professional support services are equally, if not more, important than the clerical and routine support services emphasized by the Carnegie Forum.

In some instances school officials have considered reductions in support staff in order to save professional positions. We view this option as shortsighted, because it contradicts the rationale behind the employment of support personnel, i.e. to maximize the efficient use of professional employees. School officials should not consider support staff as expendable.

Facilities and Equipment

3. Students should be provided with access to appropriate facilities and equipment in order to maintain a productive learning environment.

Students should be provided with an environment which is conducive to learning and with tools which can maximize their potential to achieve. Each student should have access to an appropriate setting for participating in educational programs including classroom and laboratory space, library and media facilities and facilities for co-curricular activities. Each student should also have access to current equipment and materials which are appropriate for the curriculum, including textbooks, resource materials, laboratory equipment and technological resources such as computers, audio/visual equipment and various types of communication equipment.

Little information is currently available about the quality and accessibility of facilities and equipment in Iowa schools. This prevents us from determining whether the quality of education has suffered because of the lack of up-to-date equipment and materials. School officials should evaluate the educational equipment and supplies which are used in their schools. In particular, school officials should examine the length of replacement cycles for equipment and materials. We strongly believe that this is an important component of a productive school.

4. Each school should provide a safe and accessible environment for its students including: appropriate identification and storage of hazardous materials, appropriate removal or encapsulation of asbestos, accessibility for handicapped individuals and a routine facility inspection program.

Financial Resources

5. Discretionary revenue sources available to local school districts should be utilized to achieve the Productive School Model.

Whenever necessary, school districts should utilize the discretionary taxing authority which is available to them. This includes the site levy, schoolhouse levy, cash reserve levy, enrichment tax and the playground (community education) levy. The committee recognizes that school officials are sensitive to public opinion about taxes and government spending. This is a natural phenomenon in a representative form of government. Nevertheless, the first priority of school officials is to provide a quality educational program. If supplemental revenue is necessary to accomplish that goal, then school officials should take appropriate action to obtain that revenue.

Further, we believe that school officials have a responsibility to continuously seek ways to maximize the productivity of the school district with available resources. Tradition should not stand in the way of alternatives which will make better use of limited resources.

"How can we do it better?" should be the motto of every school official. The committee encourages school officials to pursue creative and innovative approaches to the use of resources for the best possible educational program. Further, this recommendation applies to everyone involved in public education: teachers, parents, students, support staff and members of the community.

Keokuk Welcomes VIPS

Keokuk Community Schools have refined the art of utilizing community volunteers through the Volunteers in Public Schools (VIPS) program. The program has been successful in efficiently utilizing the talents of community volunteers while ensuring that volunteers don't get "burned out."

VIPS features opportunities for participation as instructional aides or as resource persons. Teachers work with a building coordinator and VIPS chair to request assistance for tasks such as working with students in reading or presentations on careers and travels. In the first semester of the 1985-86 school year, an estimated 1,000 hours were contributed by 83 volunteers.

One of the outgrowths of the program has been a school publishing company utilizing volunteers. Each student is asked to submit one example of his or her best work of the year, which is then bound into a book by VIPS volunteers. Students have become extremely enthusiastic about writing as a result of the VIPS program.

Part III. Achieving the Productive School Model

The Productive School Model is intended to be used as a benchmark for setting school district goals. Local school officials can compare the programs in their schools with the characteristics of the model and take actions which may cause the schools to acquire the characteristics. Now that we know where we want to go, how do we get there?

This section of the report presents a discussion of the alternative actions which local school officials may consider. Most of the ideas are not new. Many are currently being implemented in Iowa school districts. Not all are easy to accomplish and some are very controversial.

The section begins with a brief discussion about the most frequent reasons which are cited for resisting change, with a few suggestions about how school officials can overcome the resistance. This is followed by a discussion of the nine major strategies for achieving the Productive School Model. Each may require that alternative resource mixes be used to maximize access to quality educational programs. It concludes with a set of recommendations for state policymakers and for the various education organizations in Iowa.

Initiating change in education is not a simple or easy process and there are many reasons why change is resisted. We have identified three general reasons why change is resisted: political, operational and educational. Political resistance is based on concerns about issues other than the quality of the education, or how a program will operate. Resistance to change for operational reasons relates to concerns about the cost of the change, or concerns about the operation of a program. Opposition to change for educational reasons is based on the belief that an action will have a detrimental effect on the quality of the educational program. This includes such things as tradition, community pride, school pride and what we refer to as natural inertia. In this regard, complaints are often heard about the procedures the school board used in reaching a decision, rather than about the merits of the decision itself.

During our deliberations, we reviewed an analysis of newspaper articles which pertained to school reorganization, school building closings and sharing agreements. The analysis covered news clippings received by IASB during the period of April through August of 1986. While we believe that the information derived from the review is fair and accurate, it should not be considered an exhaustive review of the subject matter.

Listed below are the most frequently reported reasons for opposing change in each of the three categories which were identified.

Reasons for Opposing Change
(Sharing, Building Closing and Reorganization)

Political/Procedural

The school board acted in haste.
There was little opportunity for public input.
The board failed to follow guidelines recommended by the Department of Education.
The board did not consider other alternatives.
The action will have negative economic and emotional impact on the community.
Change is not necessary as long as the school can pay its bills and meet its budget.
Change is not necessary because the school meets the minimum standards established by the state.
It could lead to reorganization.
The desire to maintain a district's identity.

Operational Reasons

Transportation costs will increase.

Cost savings are over-estimated.
Change could cause the district to be moved into a higher enrollment category for interscholastic competition.
A schedule conflict is created with extracurricular activities.

Educational Reasons

Change will increase class size.
Closing a school eliminates the benefits of "neighborhood schools."
Students who must travel longer distances as a result of change may be less safe.

Clearly, the most frequently reported reasons for opposing change with respect to sharing agreements, school closings and reorganization are political reasons; concerns about the impact of the change on the quality of the educational program, or about operational issues were less frequent. Conversely, the most frequently reported reasons for change relate to an improvement of the quality of the educational program, or the potential for reducing costs. The only political reason which was cited on behalf of a proposed change was the desire to anticipate possible actions by the state with respect to educational standards and school reorganization.

Geri Fletcher
AEA board member

When the smoke has cleared from the educational battles of the present, the leadership from the committee for the Strategies for Excellence report may prove a valuable resource for school board members as they strive to reconstruct and improve equal/ quality educational practice.

Coping with Resistance to Change

When local school officials pursue changes in their educational program, particularly if those changes are controversial, we suggest that the following general guidelines be considered. First, always maintain the quality of the educational program as the primary consideration. While operational issues are important, the children's access to quality education should always come first. When presenting the reasons for initiating changes, emphasize the impact on the educational program. This is the best selling point.

Second, provide opportunities for the public to comment on the proposed changes. Free and open communication will allay any fears which the public may have about possible changes.

Third, it may be desirable to establish formal structures for initiating and monitoring change. These structures might include the appointment of citizen advisory committees, or teams of staff members who are trained to manage conflict which arises because of change. It may also be appropriate to use persons who are from outside the school district to assist with the process of identifying and implementing needed changes. Persons who would be qualified for this role include professional change agents, e.g. consultants in the field of organizational development, consultants from the Iowa Department of Education, consultants from area education agencies or NCA accreditation teams.

Whatever strategies your school chooses to use in the effort to achieve the characteristics of the Productive School Model and to provide the best possible education for Iowa's children, there will likely be controversy and some citizens will resist the change. School officials should be prepared for the controversy and be ready to do what is best for Iowa's children.

Strategies for Excellence

Technology in Education

Iowa school officials should act now to utilize the technology which is currently available in order to achieve the characteristics of the Productive School Model. It is not appropriate to wait any longer for further advances in technology. The availability of computers and educational software and the technologies to implement "distance learning" programs exist and should be used in Iowa's public schools.

Technology is a valuable tool in the educational process. However, it should not be considered as an end in and of itself. In order to provide school officials with guidance for the appropriate utilization of technology, we offer the following suggestions.

Criteria for successful technology utilization in education:

Commitment

School officials must make the decision to integrate technology into the schools for the purposes of improving learning by students and performing administrative, instructional and educational support functions more productively. Improved learning and productivity via technology is not likely to occur without the involvement of education policymakers.

Planning

School officials and education professionals must make decisions about what should be achieved via the use of technology, how technology will be integrated into the educational setting and when the integration of technology into the schools will occur. Planning must be a prerequisite for the purchase and use of technological tools. The plan should include a target date for implementation.

Training

Professional educators and other school employees who are expected to make applied use of technology should be provided with training about the appropriate use of technology, based on sound educational practices, as well as with training about the physical operation of the technology.

Accountability

School officials should specifically designate an employee who is responsible for planning of training for district employees and appropriate use and integration of technology in the schools. However, schools are cautioned against assigning this responsibility to individuals who specialize in a particular subject matter, such as a math teacher. Technology should be integrated throughout the school, not in a particular subject area, such as mathematics.

Expectations for change

Planning for the use of technology must be based on the expectation that technological tools will need to be regularly updated in the same way that textbooks, instructional materials and school supplies are. School officials must view technology as a continuing commitment, not a one time capital expenditure.

The Integration of Computers in Curriculum

The CAL Community School District has initiated a program for computer assisted instruction for the 1986-87 school year. The objectives of the program are to provide all students, grades pre-kindergarten through sixth grade, with the opportunity to become familiar with the operations of a microcomputer, and to provide for the maximum use of computers as an instructional tool in all disciplines. The program is partially funded by a School Improvement Project approved by the Department of Education.

The Iowa City School District has established a program which integrates the use of computers throughout the educational program. The stated philosophy of the district is that a person becomes computer literate by using a computer in many different situations over a period of time, and that the computer is seen as a medium for instruction.

Five categories of computer-related instruction are involved in the program: teaching about computers, teaching computer science, teaching with a computer, teaching productivity software, and teaching about social issues. Elementary and junior high students are taught about the basic operation, uses, and history of the computer. Secondary students are provided with opportunities to learn computer programming. Computers are used as an instructional tool in the district. Elementary students have opportunities to learn problem-solving and thinking skills using computers, and secondary students primarily use computers to learn about science and social studies. The software is selected to fit the current curriculum at the secondary level. Additionally, students have opportunities to learn how to use computers to complete their school work more productively, e.g. the use of word processing, data bases, and spreadsheets. Finally, senior high students are required to take a unit on social issues relating to computers, such as the changes which computers create in day-to-living.

Pupil/Teacher Ratios 77-78 Through 86-87 [62]

Teachers (In Thousands)

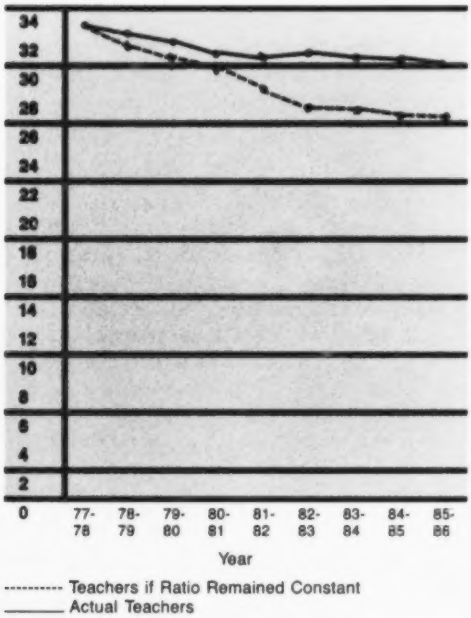


figure 9

Pupil/Teacher Ratios

School officials should analyze the pupil/teacher ratio in their schools to assure the efficient and effective utilization of the professional staff.

School officials know that the funds available to school districts are a function of enrollment and the cost per pupil under the state school foundation program. School districts which have larger pupil/teacher ratios have more financial resources for each classroom unit than do schools with lower pupil teacher ratios. There is a strong relationship between pupil/teacher ratios and the financial resources available to local school districts.

One strategy which school districts can use to achieve the Productive School Model is to increase pupil/teacher ratios. We suggest that school officials examine the relationship between the educational program and the district's pupil/teacher ratio and take actions which would group students or educational programs in a manner which would, in effect, increase the pupil/teacher ratio. Possible options include the use of technology, sharing and reorganization.

Public school enrollment in 1977-78 was 587,113 and the number of teachers employed in that year was 33,424. In 1984-85, public school enrollment had declined to 490,924; the number of teachers employed that year was 31,029.

During that time period, the pupil/teacher ratio declined from 17.57 to 15.82. If Iowa schools had the same pupil/teacher ratio in 1984-85, as in the 1977-78 school year, there would be 3,088 fewer teachers employed in Iowa (see fig. 9).[62]

Assuming that those teachers were paid an annual salary equal to the average teacher salary in Iowa in 1985-86, Iowa schools would have an additional $66,978,000 to spend on additional educational programs.

Innovative School Programs

School officials are encouraged to consider the establishment of innovative school programs which would provide students with access to programs which meet their diverse needs. Listed below are a few options which we believe school officials should consider:

- Optional class scheduling plans. Schools of any size faced with a desire to increase course offerings might consider scheduling options which could increase flexibility within their existing structure, such as:
  Early Bird Classes. Some districts have opted to provide a class period before the start of the normal school day. This structure can be used to provide enrichment classes to talented and gifted students, provide an additional option to students who are carrying full loads, address conflicts with singleton courses during the regular school day, or remove courses like Driver's Education from the regular school day, thus making available that time for another academic elective.

  By reducing teacher study hall assignments and staggering the teacher day, the additional period can be accomplished without additional expenditures. Transportation is usually not provided for early bird classes, so that tends to be the most difficult problem to overcome.
  Modular Scheduling. Districts can increase offerings and still meet time mandates of the Carnegie unit by going to a six-day cycle from the traditional five-day week. This can also be an effective tool for manipulating large and small group instruction, providing more appropriate time frames for lab oriented courses and increasing opportunities for independent study and individualized instruction.
  Increasing the Number of Periods Per Day. Some expansion of course opportunities may be accomplished by increasing the number of periods in the day. Concerns that need to be addressed include the negotiated contract, the number of preparations per teacher and the effective length of the instruction period. However, adding a single period to the daily schedule might greatly enhance course options to the student. This might also provide a vehicle for increased use of technology for instruction.
- Early graduation programs for secondary students. Encouraging students to fulfill graduation requirements earlier may reduce costs and provide expanded opportunities for other students.
- Expanded summer school offerings. Summer school programs can be designed to meet the needs of students with special needs and can be integrated with an early graduation program.
- Academic summer camps in specific subject areas.
- Voluntary open enrollment policies among public school districts for academic programs. Appropriate timelines and procedures would be required to allow school officials to plan for budgets and program delivery. If school districts are unable to provide certain students with access to programs which meet their needs, then school officials should consider paying tuitions for those students to attend school in a neighboring school district. We believe that school boards should be responsible for adopting policies concerning this option and that it should not be mandated by state law. We oppose the concept of state voucher plans.
- Rotation of academic schedules throughout the school year. Students would continue to be in school for approximately the same amount of time each year. However, the schedule of classes would be rotated throughout the entire calendar year, meaning that a portion of the student population would be attending school during the summer.

- As an alternative to traditional graduation requirements, school officials should consider programs which are specifically designed to assist students with the completion of the test for general education development (GED).

Educational Programs Provided Through Sharing Agreements [62]

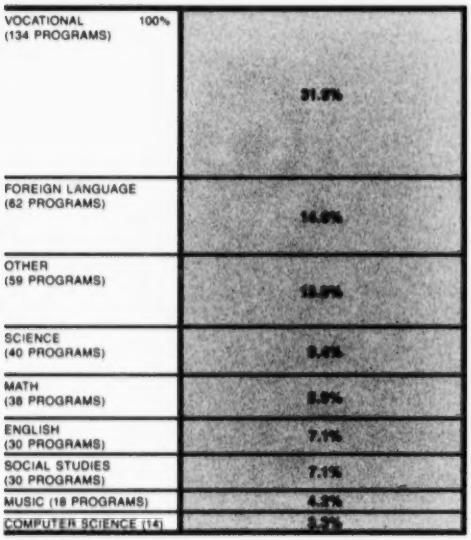


figure 10

Sharing

Public educators should actively investigate ways to cooperatively meet the needs of their students, as well as meet the needs of their community and school district. It is not enough to wait for opportunities to arise; opportunities for expanded sharing programs should be created. School officials should pursue expanded opportunities for joint/cooperative purchasing.

Whole grade sharing

In 1983, the Iowa legislature provided school districts with the authority to share whole grades. The option is designed to allow school districts to combine all or part of their educational programs, without formally reorganizing.

Twenty school corporations have entered into whole grade sharing agreements for the 1986-87 school year. Each of those districts share their middle or secondary school programs and two of the districts also share their elementary programs.[63]

Ten of the districts participating in whole grade sharing also jointly employ their superintendent. Twelve of the 20 participating school districts have an enrollment of less than 250 and 17 of the districts have an enrollment of less than 500.[64]

School districts participating in whole grade sharing programs receive a supplemental weighting of 0.1 per pupil for students involved in the sharing program. This weighting is part of an incentive program established by the legislature to encourage school districts to share as an alternative to reorganization.

Successful Sharing for Educational Excellence

"An aura of openness and fairness is an absolute prerequisite to successful sharing," Union-Whitten Board President Bill Patton states in no uncertain terms.

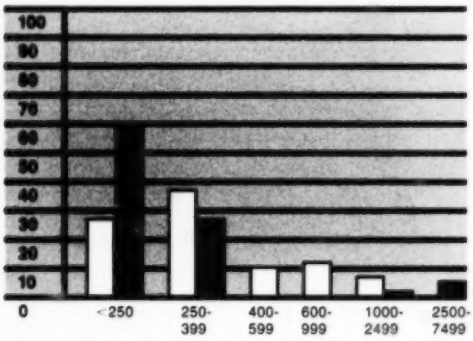
As a result, board members and administrators involved with the whole grade sharing agreement for Beaman-Conrad-Liscomb and Union-Whitten focused their energies on their number one priority: quality education. Jack Arnett, Superintendent of Union-Whitten Schools, comments "If you're getting into sharing for the money, don't even consider it."

The whole-grade sharing agreement calls for each district to house their own kindergarten, with grades one through four traveling to BCL, grades five through eight to Union, and grades nine through 12 to BCL.

The sharing agreement was not without problems. The districts utilized the expertise of the Department of Education as they formulated their agreement, and in formulating a workable transportation plan.

The concrete benefits for students at UW and BCL have been many. A school building in Union, previously in danger of being closed, is now fully utilized as a middle school; BCL picked up 11 new courses, UW picked up 19, enabling addition of another foreign language to the curriculum and addition of two college credit courses; more students now participate in extracurricular activities. Financial resources have increased too, through supplemental weighting and sharing efficiencies — but UW and BCL regard that as merely a side-benefit — the important thing is that students have a better quality education as a result of their efforts.

Students Participating in Shared Programs [1985-86]
Percent of Total Shared



(0.5) Enrollment	No. of Students	% Total Shared
<250	2,196	28
250-399	2,997	38
400-599	907	12
600-999	1,101	14
1,000-2,499	586	8
2,500-7,499	39	0
Total	7,826	

(0.1) Enrollment	No. of Students	% Total Shared
<250	697	62
250-399	317	28
400-599	8	0
600-999	0	0
1000-2499	40	4
2500-7499	63	6
Total	1,125	

figure 11

Districts Which Received Weighting for Shared Programs[66]

Enrollment	Number of Districts	Percent of Districts Sharing
Up to 250	38	23
250-399	43	26
400-599	35	21
600-999	27	16
1,000-2,499	17	10
2,500-7,499	6	4
Total	166	100

Music Sharing[67]

Enrollment	Number of Districts	Percent of Districts Sharing
Up to 250	10	36
250-399	5	18
400-599	3	11
600-999	2	7
1000-2499	2	7
2500-7499	5	18
7500+	1	3
Total	28	100

Curriculum-specific sharing

Iowa law also provides an incentive for school districts to cooperatively provide educational programs. The incentive is in the form of a supplemental weighting for the proportion of the school day in which a student participates in a shared program. Prior to the 1985-86 school year, the amount of the supplemental weighting was .1.

In 1985, the legislature increased the amount of the weighting to 0.5, in certain circumstances. Generally, students participating in a shared program are weighted at .5. The weighting for whole grade sharing continues to be 0.1. During the 1984-85 school year, 126 school districts received supplemental weighting for participating in a shared educational program. The number of pupils participating in shared programs that year was 6,958. A supplemental weighting of 172.1 full-time equivalent students (FTE) was generated statewide, representing a statewide budget increase of $426,616 for the participating districts. The 1985-86 school year was the first school year in which the higher (0.5) weighting applied. The number of school districts which received a supplemental weighting that year was 166, a 32% increase over the previous year. Additionally, 8,951 students participated in a shared program that year, a 29% increase.

Final figures on the amount of additional funds which will be generated for the 1986-87 school year are not currently available. Assuming a district cost per pupil of $2,500, the 0.5 weighting for the 574.5 FTE pupils would increase school budgets by $1,436,250; the 0.1 weighting for the 112.3 FTE students in whole grade sharing programs would increase school budgets by $280,750. Total budget increases, given the assumptions stated above, would be approximately $1,717,000; a 302% increase over 1984-85.[65]

The most frequently provided educational programs by the 166 participating districts in the 1985-86 school year were vocational, foreign language and science and math (see fig. 10).

School districts with the lowest enrollments participated more heavily in sharing programs and most of the students participating in a sharing program were from the smallest sized school districts. Of the districts which participated in a sharing program during the 1985-86 school year, 49% had an enrollment of less than 400. Sixty-six percent of the students participating in a sharing program which was eligible for the 0.5 weighting were from districts with an enrollment of less than 400. Of the students who participated in a sharing program which was eligible for the 0.1 weighting (primarily whole grade sharing), 90% were from districts with an enrollment of less than 400 (see fig. 11).[67]

Music sharing

Twenty-eight school districts participate in a sharing agreement for music programs. Half of the agreements cover all music programs in the districts. The balance of the agreements cover either band or orchestra only. One agreement involves both band and chorus.

Shared administrative functions

Little information currently is collected concerning shared administrative functions among school districts. Contracted administrative services are not considered here. Generally, when this subject is discussed, it primarily concerns the joint employment of administrators. Legislation was enacted in 1986 which provides an incentive for school districts to jointly employ administrators, excluding principals. School districts which enter into this arrangement are granted a supplemental weighting of 0.05 for each pupil in the district, up to a maximum total weighting of 15. The amount of the weighting each district is eligible for is also a function of the amount of time the shared administrator spends on duties for each district.

Boys Athletic Sharing Agreements 1986-87[74]

Sport	Number of Agreements
Football	41
Wrestling	27
Cross Country	14
Swimming	14
Basketball	7
Track	26
Summer Baseball	18
Tennis	5
Golf	14
Total	166

Schools Participating in Boys Athletic Sharing[75]

Enrollment	Number of Districts	Percent of Districts Sharing
Up to 250	34	26
250-399	35	27
400-599	20	15
600-999	16	12
1,000-2,499	14	11
2,500-7,499	7	6
7,500+	4	3
Total	130	100

Athletic Sharing (Excluding Swimming)[76]

Enrollment	Number of Districts	Percent of Districts
Up to 250	34	29
250-399	35	30
400-599	19	16
600-999	15	13
1,000-2,499	11	9
2,500-7,499	3	3
7,500+	0	0
Total	117	100

Girls Athletic Sharing Agreements — 1986-87[77]

Sport	Number of Agreements
Cross Country	25
Volleyball	16
Swimming	10
Basketball	16
Gymnastics	9
Track	42
Tennis	5
Golf	28
Softball	26
Total	177

Schools Participating in Girls Athletic Sharing[78]

Enrollment	Number of Districts	Percent of Districts Sharing
Up to 250	23	29
250-399	19	24
400-599	9	12
600-999	9	12
1,000-2,499	10	13
2,500-7,499	7	9
7,500+	1	1
Total	78	100

Until the passage of this legislation, shared administrators were primarily limited to superintendents. In the 1981-82 school year, four superintendents were jointly employed by Iowa school districts. That number has more than doubled, with 11 superintendents being jointly employed in the 1986-87 school year. Fourteen of the 22 districts involved in the shared superintendent agreements have an enrollment of less than 400. Eleven of 14 have an enrollment of less than 250. In all but four cases, districts which are sharing a superintendent are from different enrollment categories. The other four districts each have an enrollment of less than 250.[72]

Shared extracurricular activities

Rules adopted by the Department of Education allow school districts to share interscholastic athletic programs. During the 1986-87 school year, 130 Iowa school districts participate in a boys interscholastic athletic sharing program. In all, 166 agreements, covering nine different sports are in effect.

Of the 130 school districts involved in the athletic sharing agreements, over half are districts with an enrollment less than 400.

Excluding school districts which are only involved in sharing agreements for swimming, which is primarily offered in larger sized school districts, the percentage is somewhat larger.

Seventy-eight public school districts participate in a sharing agreement for girls athletic programs, covering nine different sports.

Reorganization/Dissolution

School officials which are unable to achieve the characteristics of the Productive School Model by utilizing the other strategies discussed in this report should consider the option of school reorganization or dissolution.

We recognize that this alternative is not easy to face. School district reorganization is final. Once completed it is unlikely that it could be reversed. A statement in the 1985-86 IASB Beliefs and Resolutions urges school boards "to continually reassess the quality and extent of its educational programs," in view of the local school districts enrollment trends and financial resources, which may cause the citizens and school board "to investigate whether the school should continue to operate within its present geographical boundaries." We believe that the first priority of every school board should be the needs of the children in its school district.[79]

Reorganization

The Mingo school board had been talking about reorganization for nearly five years before they finally approached Colfax and Baxter to request a Department of Education feasibility study.

What the Mingo board found out in the course of their investigation that was citizens overwhelmingly preferred reorganization with Colfax as opposed to Baxter. From there, the two school boards embarked on a methodical road towards reorganization that included consultation with the Department of Education, public input, citizen involvement and thorough discussion of all aspects of the pros and cons of such a move.

Reorganization was approved by voters in November, 1986, and the Colfax-Mingo Community School District now benefits from improved educational opportunities. Previously, Mingo High School offered 45.5 units — the reorganized high school now offers about 60. Students benefit from increased scheduling flexibility, larger, more stimulating class sizes, greater participation in extracurricular activities and increased space for shop and vo-ag classes.

Teachers have experienced reduced numbers of preparations necessary, and are able to teach in their area of expertise. As a result of the consolidation, Mingo students gained access to 21 more courses. Transportation costs have increased, but were more than offset by other savings used to augment the curriculum. Students seem excited by the new school, choosing mottos and symbols which reflect unity and support during the transition.

Elementary principal Larry Kruckenberg feels the reorganization succeeded for the following reasons:

1) most all faculty were kept from both districts
2) all facilities were put to good use
3) curriculum improvements occurred at all levels
4) ideal class sizes were established at the elementary and middle school

Supplemental Resources for Instruction and Administration

School districts should draw upon the resources of other Iowa education organizations to achieve the Productive School Model. Among the organizations which are available to assist local school officials are: the Department of Education, area education agencies, merged area schools, independent colleges and universities and the Iowa Association of School Boards. A description of many of the services available from these organizations follows.

Department of Education

The Department of Education administers a variety of state and federal education programs and regulates the operation of public and nonpublic schools. Additionally, the department plays an important leadership function in Iowa's public education system. Many of the leadership activities in which the department participates are in the form of direct services to local school districts. School officials should be fully aware of these services and should utilize them whenever possible.

Services provided by the Department of Education include consulting, staff development, information collection and dissemination and other specialized services.

Consulting Services

Assistance is available to local school districts by department consultants in the following areas:

Financial, pupil and property accounting
School transportation
School safety
Safety education
School reorganization
School district sharing
Facility utilization
Child nutrition and commodity food processing
Energy conservation and energy efficiency
School administration, finance and law
Technology in education
School improvement models
Guidance counseling and testing and student placement
Curriculum development
Staff development
Program evaluation
Educational equity issues such as equal educational opportunity, school desegregation, multicultural and nonsexist education and affirmative action

Consulting services are also available in many curriculum areas, including: the arts, bilingual education, environmental education, energy education, health, physical education and recreation, individualized instruction, language arts, mathematics, educational media, science, social science, substance abuse prevention, dropouts, talented and gifted education, career education and education of handicapped and disadvantaged students.

Staff development services

Staff development programs have also been provided by the department in many of the areas previously listed. Additionally, staff development programs have been provided in the areas of school bus driver training, new administrator orientation, teacher induction programs and volunteerism.

Information services

The department collects and disseminates data and information about education to the public and to the education community. Services include summaries of the Secretary's Annual Report, enrollment statistics, school finance information, information about model and exemplary programs and suggested guidelines in various areas of curriculum and school operations.

Other services

School bus inspections: All vehicles used as school buses by local school districts are inspected semi-annually by the department.

Regional consultant services: These services include coordination of area superintendent meetings. Regional consultants may also be available to provide assistance to local school districts in complying with the new educational standards.

Resource Center: The center maintains a broad collection of education-related print materials including professional and trade publications, examination copies of school textbooks, serial publications and a historical file of documents published by the Department of Education. The Resource Center is available to the educators throughout Iowa and many of the serial publications are available to local libraries through a cooperative arrangement with the State Library.

Veronica Bell
Clarke Community Schools principal

The Strategies for Excellence report — an opportunity to focus our thinking on where we want education in Iowa to be — an opportunity to direct our efforts to determine the best way to get to that point.

Area Education Agencies

Fifteen area education agencies were established in 1975 to serve as intermediate support units for local school districts in Iowa. Area education agencies provide three categories of service: special education support services, media services and other educational services. In addition, the state has directed the AEAs to perform other functions which extend beyond providing services to local school districts including the preparation of reorganization plans, conducting hearings for reorganization petitions, approving district boundary line changes and conducting hearings on school transportation conflicts in local school districts. AEAs also provide direct instructional services to students in juvenile homes and shelter care facilities.

We encourage school officials to fully utilize the programs and services which are available from the area education agencies. A brief review of the services which are available to local school districts from the area education agencies follows.

Special Education Support Services

Consulting Services in Special Education: Consultants assist school officials with the development and implementation of curriculum and with the integration of special education students into the regular school program and they participate in the process of placing special education students in appropriate programs.

Consultants serve in the following special education categories: mental disabilities, learning disabilities, behavioral disorders, physical disabilities and preschool disabled.

Other special education support services provided by the area education agencies: work experience consultation services, special education nursing services, physical therapy services, occupational therapy services, instruction of preschool handicapped and cooperative instruction programs for special education students.

Other specialists employed by AEAs for special education services: parent/child program coordinators, school psychologists, school social workers, speech and language clinicians, communication aides, audiologists, teachers of the hearing impaired, audiometrists, teachers of the visually impaired, interpreters for the hearing impaired and other specialists who serve students with unique needs.

Media Services

The AEA media divisions provide a broad range of services to local school districts including library services, production services, inservice programs and certain administrative services.

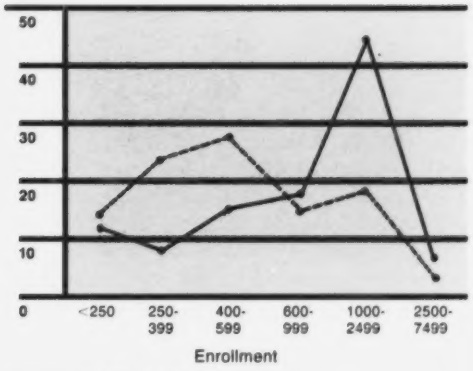
Library services provided by the media divisions include collecting and disseminating resource materials for use by teachers in their lesson plans, a professional reference library for Iowa educators, inter-library loans, reviews and screenings of media resource materials and consulting and training services for educators in the use of various resource materials and equipment.

Production services provided by the media divisions include duplication and editing of audio/visual materials and a wide variety of printing and publication services.

Media services also provide some training for educators in the use and integration of media into the educational program, including the use of microcomputers and electronic information systems.

Students Participating In Shared Programs With Merged Area Schools [1]

Percent of Total



Enrollment	No. of Districts	% of Districts Sharing
<250	7	14
250-399	12	23
400-599	14	27
600-999	8	16
1000-2499	9	18
2500-7499	1	2
Total	51	

Enrollment	No. of Students	% of Students Participating
<250	116	11
250-399	83	8
400-599	155	15
600-999	176	17
1000-2499	439	43
2500-7499	63	6
Total	1,032	

figure 12

Educational Services

State law provides the AEAs with broad discretion concerning the services provided to local school districts by the AEA educational services division. Often, the services which are provided reflect suggestions made by local school officials and teachers. Services include staff development and inservice programs, guidance and testing services, administrative computer services, various educational consulting services, research and evaluation services and cooperative programming such as pooled purchasing of materials and equipment. Educational services divisions also provide specialized programming in the areas of substance abuse, talented and gifted, early childhood education, various school improvement models and academic competitions.

Merged Area Schools/Community Colleges

In cooperation with the superintendents of Iowa's 15 merged area schools, a questionnaire was distributed for the purpose of preparing an inventory of programs and services which are cooperatively provided by the area schools and the local school districts. Fourteen of the 15 merged area schools responded to the questionnaire.

The results of the survey indicate that public schools and the merged area schools cooperate in a variety of programs. Officials in the merged area schools expressed interest in pursuing further ways in which they can cooperate with local school districts. Seven of the merged area schools indicated that they have planned for future cooperative activities with local school districts.

We encourage school officials to fully utilize the programs and services which are available from the merged area schools and to investigate ways in which more cooperation can occur in the future. A brief description of the programs and services which are available in cooperation with the merged area schools follows.

Vocational programs for high school students

Thirteen of the 14 merged area schools which responded to the survey indicated that vocational programs are cooperatively provided to area high school students. In most cases the programs are funded by the local school districts. In several cases, the programs were partially funded by the merged area school; some programs were funded in part by the state and federal governments. In one case, a vocational class was funded in part by student tuition.

Programs cooperatively provided for high school students by merged area schools and local school districts are eligible for supplementary funding through the state foundation program. Local school districts receive the additional funding, which is used to finance the cooperative program at the merged area school. Tables show the number of school districts which participated in a cooperative program with a merged area school and the number of students who participated in a cooperative program which was eligible for the supplementary funding (see fig. 12).

Thirteen percent of the students in Iowa who received instruction via a weighted shared program in 1985-86 participated in a program which was provided cooperatively with a merged area school. Most of the programs were in vocational education.

We recognize that some school officials will decide to continue providing job-specific training to public school students. We believe that public schools which offer such programs should do so in cooperation with the merged area schools.

Programs eligible for college credit

Ten of the merged areas offer opportunities for high school students to enroll in vocational, or arts and sciences courses which are eligible for college credit. In most cases the students pay some tuition for the courses, although a few programs are partially funded by the local school district and support services are provided by the area education agencies.

Jeri Jenner
Waterloo board member

The report contains a wealth of information which will be helpful to school districts across the state as they continue to improve the quality of education in Iowa.

Vocational programs for handicapped students

Five of the merged area schools provide job training programs or other vocational programs for handicapped students. These programs are funded by the local school districts and support services are provided by the area education agencies.

Other educational programs

Several of the merged area schools indicated that they participate in federally funded job training programs in which public school students are enrolled. Additionally, two merged area schools operate an alternative school for dropouts and potential dropouts in cooperation with local school districts in the area.

Other services

Five of the merged area schools responding to the survey indicated that they provide computer/data processing services to area school districts. Local school districts are charged for the cost of these services.

Independent Colleges and Universities

In cooperation with the Iowa Association of Independent Colleges and Universities, a questionnaire was distributed to Iowa's 28 independent four-year colleges and universities and to two independent two-year colleges. Fifteen of the four-year institutions and one of the two-year colleges responded to the questionnaire. The purpose of the questionnaire was to prepare an inventory of programs and services which are available to local school districts from the independent colleges and universities in Iowa.

The results of the questionnaire show that a wide range of cooperative activity exists between the public schools and the independent colleges and universities. Twelve of the respondents indicated that they were satisfied with the cooperation that exists with the public schools and that they believed further cooperation in the future was desirable. However, the results of the survey show that there is very little planning for future cooperation. Only four of the institutions said that they have planned for a future program to be provided cooperatively with public schools.

In addition, most of the independent colleges and universities indicated that they cooperate primarily with the public school district in which the institution is located. There are some programs which involve other public school districts in the vicinity of the college, but most of the programs are best accessed by the resident school district. The exceptions to this are the student teaching programs sponsored by the colleges and universities, in which student teachers are placed in the surrounding school districts.

Below is a brief description of the programs and services which were identified as a result of the survey. School officials are encouraged to explore cooperative arrangements with the independent colleges and universities in their geographic area.

College level courses for high school students

Eleven of the 16 respondents indicated that programs were available to high school students for college credit. In most cases, the programs were supported by the college or university by reducing or waiving the normal tuition charge. Seven of the institutions which provided these programs required some financial contribution by the student.

Programs for public school students (non-college credit)

Ten of the colleges and universities provide programs for elementary and secondary students other than courses for college credit. Examples include a talented and gifted program, a debate symposium, an elementary foreign language program, a young writers' program, music festivals and various advanced high school subjects. In most cases, these programs are partially subsidized by the institutions, with nominal charges for participation.

Student teaching/teaching practicum and pre-student teaching programs

All but one of the colleges or universities sponsor a pre-student teaching, teaching practicum, or student teaching program in cooperation with local public school districts.

Use of college facilities

Eleven of the institutions which responded to the questionnaire provide local schools with access to their facilities. In most cases, these cooperative arrangements are for the use of athletic facilities and facilities for meetings and concerts. Funding for these arrangements is varied, including reciprocal agreements for the use of certain public school facilities and usage fees.

Access to the college library and various cultural activities

Twelve of the institutions provide free access to their library for public school students. Respondents also indicated that many of the cultural activities in the colleges and universities are also open to the public.

Staff development/curriculum development/other assistance to teachers

Six of the colleges and universities provide services in the areas of staff development, curriculum development and other services designed to be of assistance to elementary and secondary teachers. Funding for these programs is derived from a variety of sources, including federal and state funding, local school district funding, charges to individual participants and subsidies from the college or university.

Shared staff

Five of the colleges and universities indicated that some type of cross-utilization of staff was present with the local school district. Examples cited include public school teachers serving as part-time instructors at the college, college teachers who served in part-time teaching or coaching positions in the public school and college student work study programs involving jobs in the public school.

Iowa Association of School Boards

The Iowa Association of School Boards (IASB) is a private, nonprofit organization. Its membership is comprised of the school board members in 435 public K-12 school districts and the board members of the 15 area education agencies and the 15 merged area schools. IASB provides a broad range of services to school board members and local school districts including various meetings and conferences, publications concerning current issues in Iowa's public education system, legislative representation, a broad array of employee relations and management services, legal services, a new policy development service, a new superintendent selection service, general consulting services and other services for school districts in specialized areas, including various insurance programs, the Legal Service Fund, the Iowa School Cash Anticipation Program (ISCAP) and the Iowa Schools Joint Investment Trust.

Other Education Organizations

A variety of other membership organizations serve the needs and interests of school officials in Iowa. These organizations are designed to help their members better perform their functions within Iowa's education system and to generally promote public education in Iowa. Among these organizations are: Iowa Association of School Administrators (IASA), Iowa Association of School Business Officials (IASBO), Educational Administrators of Iowa (EAI), Iowa Association of School Board Secretaries (IASBS), Iowa Congress of Parents and Teachers (PTA). School board members should encourage their employees and members of the community to participate in these organizations in order to take advantage of the expertise of the leadership and programs which are provided and to promote their professional and personal growth.

In addition, there are a variety of other organizations which are designed to serve the professional needs of teachers and other educators, including the Iowa Association of Supervision and Curriculum Development, Council for Exceptional Children, Iowa Council for Teachers of Mathematics, Iowa Council for Teachers of English, Iowa Guidance Association, Iowa Vocational Association, Iowa Association of School Psychologists, Iowa Academy of Science, Iowa Community Education Association, Iowa Reading Association, Iowa Association for Education of Young Children and Iowa Association of Alternative Schools and Iowa State Education Association.

Alternative Staff Utilization Plans

School officials should consider options which would utilize the staff in a manner which takes full advantage of their skills and abilities. This may require that the school schedules and staff assignments be established in a way which is different from current practices. Examples of staffing and scheduling alternatives follow.

- Expand the use of extended contracts, during the regular school year and during the summer interim. School officials may wish to provide opportunities for teachers to perform non-supervisory (evaluation and supervision of other employees is not involved) administrative functions using this option.
- Expand the use of teacher aides and volunteers.
- Utilize employee sharing options among school districts for specialized education functions including:
  - development of curriculum guides and materials
  - technology specialists
  - performance evaluation specialists

Building Utilization Options

School officials should periodically evaluate the physical plant of the district and consider changes based on current and projected needs. Options available to schools include sharing with other organizations or consolidating the physical plant within the district. Below is a discussion of these options, with an emphasis on the closing of school buildings.

- School officials should seek out opportunities for shared facility agreements with other government agencies and with private sector organizations. We recognize the limitations associated with the cooperative use of classroom space. However, school officials could share administrative offices with other units of local government.
- Close school buildings — when indicated by enrollment trends and the economies of operation.

Closing School Buildings

We examined information about closing school buildings from the analysis of news clippings received by IASB during the period of April-August, 1986. Based on that review we found that most school closings occurred in larger communities. Fifty percent of the school districts which closed a building had an enrollment of 1,000 or above. Fifty-five percent of the buildings which were closed were located in school districts with an enrollment of 7,500 or above. Some school districts closed more than one building.

Twenty of the 22 buildings which school boards decided to close during the period are elementary units.

The following is a brief description of the issues which affected recent decisions by local school boards with regard to the closing of school buildings. Generally, this discussion may also be applicable to the issues of school reorganization and sharing agreements, although the procedures and legal requirements are different. We commend this review to local school officials who are faced with decisions relating to the structure and operations of their school districts.

The most frequently reported reason for closing an attendance center was cost savings (ten districts specifically cited this rationale). Program flexibility and maintenance was cited in four cases, avoiding an increase in taxes in two cases and the poor condition of the facility in two cases.

The most frequently reported reason for opposing the closing of a building related to the process that was used by the board. This includes the following arguments: the school board acted in haste, little opportunity was provided for public input, the board failed to follow guidelines recommended by the Department of Education and the board did not consider other alternatives.

There did not appear to be any prevalent argument against closing the school based on educational reasons. Other reasons cited for opposing the closing of a building included: cost savings are overestimated, e.g. transportation costs will increase and negative economic and emotional effects on the community/neighborhood.

Several procedural aspects of the decisionmaking process appear to be important. First, school closings are generally issues which have been considered for a period of time prior to the action taken by the school board. Five of the cases examined made specific reference to discussions and planning which had occurred in previous years. Some districts appear to have waited for the "right opportunity." Factors such as the makeup of the school board and an "enrollment threshold" may contribute to the decision to take action. One of the school districts in which action was pending at the time of the study waited to see the outcome of the school election.

Second, most school districts which considered the closing of a school have received recommendations from an advisory committee. Eight of the cases reviewed utilized this process. One board received an administrative staff recommendation only and one board was directly involved in the planning process. In two cases, a building study by the Department of Education was referred to as a basis for the action.

Third, procedures for interaction between the community and the board/administration appear to be mixed. In two cases, the board/administration participated in the discussion at the public hearing. In two cases, the board/administration only received comment. Several of the cases reviewed indicated that the board/administration responded to community concerns at a board meeting. Most of the community members involved in the public discussion appeared to be affected parents. Some "taxpayer" interests were also represented.

Fourth, most of the boards appeared to make the decision sometime after the hearing.

Based on our review of these issues, we make the following recommendations to school districts which are considering the closing of a school building.

Recommendations for Closing School Buildings

1. Establish an advisory committee to consider various options with regard to the district's facility needs. The advisory committee should have clear direction from the board about their task and they should be directed to make specific recommendations to the board.

John W. Axel
Muscatine board member

"It became apparent that all educational interests in the state . . . should work together to best utilize the educational resources of our state."

2. If an advisory committee makes recommendations to the board, the board should respond to the report of the committee. While boards are not obligated to agree with the recommendations of an advisory committee, the board should provide comment about their differences with the advisory committee's report.

3. Document the current status of the educational program in the district. Review previous discussions by the board about the district's programs, prior to initiating the decisionmaking process for closing a school. This appears to discount the validity of claims that the board acted hastily and strengthens the position of the board if the decision is appealed to the State Board of Education.

4. Review the guidelines established by the Department of Education. These are the standards which the Department of Education will use to review the school board's decision, if it is appealed. In particular, school officials should provide ample opportunities for the public to comment on any proposal to close a school building.

5. Establish procedures for receiving comments from the public. We believe it is appropriate for school officials to determine what procedures are to be followed based on factors which are present in each situation. The critical issue is whether or not procedures have been established. Do not wait until the public hearing begins to decide what procedures will be used.

6. Establish a date for making the decision sometime after the public has an opportunity to comment. It is not recommended that a decision be made immediately following the public hearing. School boards should seek a balance between expediting the decision and providing adequate opportunity for public input.

School Improvement Projects by District Size (1986-87)[81]

District Size	Projects
Up to 250	6
250-399	14
400-599	18
600-999	13
1,000-2,499	25
2,500-7,499	14
7,500+	6

School Improvement Projects by Subject Matter[81]

Project Subject	# Projects
Staff Development	32
Computer Curriculum	24
Writing/Reading	23
Curriculum Revision	17
Math	9
Guidance Counseling	7
Student Achievement	5
Learning Styles	5
Kindergarten/Pre-K	5
Summer School	5
Foreign Language	4
Industrial Arts	4
Thinking Skills	3
Health	3
Library Resource	3
Mastery Learning	3
Data Bases	3
Science	2
Arts	2
Others	10

Alternative Sources of Funding

School officials should consider utilizing available sources of discretionary revenue if funds provided by the state foundation program are not sufficient to achieve the Productive School Model. A few alternatives are listed below.

- Utilize additional allowable growth available for talented and gifted programs, dropout programs and school improvement projects.

Ninety-six school districts received approval from the Department of Education for school improvement projects in 1986-87. Total budgets for the projects amounted to $4,775,315. Of that amount, $3,535,868 was provided by additional allowable growth.[82] Funding for the projects is limited to 1% of the district's regular program district cost. Information about allowable growth for talented and gifted and dropout programs was previously discussed in the report.

One hundred and sixty-nine projects were approved by the Department of Education for additional allowable growth within those 96 school districts.[84]

- School officials should consider seeking voter approval for the enrichment levy.
- School officials should consider expanding user charges for consumable services where appropriate.
- School officials should consider limiting all transportation services which are not mandated by law.
- School officials should consider establishing an education foundation or endowment trust.

Part IV. Legislative Recommendations

The committee recognizes that the legislature has the constitutional responsibility for providing public education in Iowa and that the authority of school boards for the operation of public schools is delegated to them by the legislature. We believe that state policymakers and local school officials should act in partnership to provide a quality education to all Iowa children.

However, the legislature and local school boards have recently acted more as adversaries than as partners. Legislators have raised questions about "inefficient" school districts and school officials have expressed concern about the availability of funds, mandates without additional funding and intrusions into "local control."

It appears to us that one reason the legislature has acted to encourage school efficiency is to force small school districts into reorganization. Unfortunately, such actions have resulted in unforeseen side effects. Instead of pursuing school reorganization, school districts have pursued cost saving measures which may have reduced school productivity and the quality of education. Below is a brief description of some state policies that have been either explicitly or implicitly established in recent years and the changes that have occurred in local school districts which may be a result of those policies.

1. Uncertainty about state funding and/or possible new mandates imposed by the legislature.

Since 1980, when the first of four across the board cuts was implemented, uncertainty has been present about whether the state will be financially able to live up to funding levels for schools established through the school foundation program. Further uncertainty was created in 1986 when the Governor proposed a freeze on all property taxes. This situation has caused local school officials to take actions in anticipation of these possibilities. Since school districts negotiate contracts with employees based on anticipated revenue from the state, prior to the beginning of the next fiscal year, school officials have had to prepare contingency plans. Maintaining cash balances is one of the few ways local school officials can prepare for the possibility of a reduction of anticipated revenue.

The state has on some occasions fallen several months behind in the payment of state aid to schools. This situation has improved considerably in the last two years since the state began issuing tax anticipation notes. The state has been able to meet its commitments in a more timely fashion.

2. Criticism of excessive administrative costs.

In recent years the legislature has considered bills which would limit the amount of school budgets which could be expended for administration. In 1986, the legislature enacted a bill which limits expenditures for executive administration to 5%. School boards have reacted to this pressure. Today, over 100 school superintendents have assumed the responsibilities of a principal. It has also been shown that school administrators have been reduced at a greater rate than teachers have been.

3. Promoting "harmonious" relationships between employees and employers.

In 1974, the Iowa Public Employment Relations Act was enacted, marking the beginning of public employee collective bargaining in Iowa. The stated public policy in the law is "to promote harmonious and cooperative relationships between government and its employees . . . " In addition, the purpose of the legislation was to assure the effective and orderly operation of government, to prevent strikes and to protect the rights of employees to join or refuse to join employee organizations.

This legislation provided public employees and their bargaining representatives with additional leverage to seek higher compensation and better working conditions.

Frank Reyner
North Fayette board member

It was a pleasure to work with the IASB staff and other Iowa educators in developing this help for our Iowa schools. It is hoped this guide will enable our fine schools to become even better as we strive to become the finest in the nation.

Similarly, legislation was approved in 1976 which established formal due process procedures for the termination of teachers based on "just cause." The purpose of this legislation was to assure that when the continuing contract of a teacher was terminated, the action would be based on due process of law.

In 1986, state policymakers are now calling for greater accountability by school officials for the quality of the educational program. School officials are also faced with the need to find new ways to utilize limited resources in order to deliver a quality education to Iowa's children.

In our view, the collective bargaining process and the teacher termination law have not promoted "harmonious" relationships. Rather, the requirements under these laws have placed school officials and teachers in adversarial roles. We also note that Iowa's national ranking for teacher salaries has declined from 24th to 37th since these laws were enacted.

Further, we believe that these laws constrain school officials from making decisions which would maximize the quality of education using the resources which are currently available. It is unrealistic to expect school officials to be held accountable for the quality of education and teachers under the legal constraints within which they are required to operate.

A case in point is a recent Supreme Court decision which ruled that evaluation criteria is a mandatory subject of bargaining and that the results of an evaluation are grievable to an outside arbitrator under the provisions of a negotiated contract. In our view, this decision greatly reduces the accountability of local school officials regarding the quality of teaching in Iowa schools.

We believe that teachers should have a meaningful voice in the operation of the public schools and that schools should be characterized by a professional, collegial environment. However, state policymakers must recognize that this goal is not likely to be fully achieved under the current law. This problem was clearly recognized by the Carnegie Forum in *A Nation Prepared.*

> "In many, if not most cases, involving teachers means working through their representatives, the unions. The confrontational stance that frequently characterizes the relationship between school boards and unions could doom [our] recommendations."
>
> "[The] focus of bargaining can and should be changed. Unions, boards and school administrators need to work out a new accommodation based on exchanging professional-level salaries and a professional environment, on the one hand, for the acceptance of professional standards of excellence and the willingness to be held fully accountable for the results of one's work, on the other."

If state policymakers desire better use of current education resources, without compromising the quality of education, then a coherent statewide strategy is required. Local school officials must have a strong voice in the establishment of the state's education policy. Additionally, local school officials should respond to state policy changes in a manner which does not sacrifice quality.

We believe it is possible to establish a cooperative relationship between state policymakers and school officials which will make positive improvements to Iowa's public education system. To that end, we offer the following suggestions:

1. Local school officials should make an effort to share information about the educational program and about local school operations in their school districts with their legislators. In particular, legislators should be made aware of the district's goals, plans for achieving those goals and barriers which may prevent the district from achieving those goals. When appropriate, the opinion of state legislators should be sought concerning issues which are before the school board. School principals could also consider "adopting" a legislator to promote understanding about activities at the building and classroom levels.
2. Legislators should make an effort to become knowledgeable about the programs and operations of the school districts which they represent. In particular, legislators should discuss possible changes in state education policy with local school officials to determine the effect of the policy change in their school districts.
3. State policymakers should attempt to establish a state education policy which reduces uncertainty about school funding, allows recently adopted state policies on educational standards to be fully implemented and which increases the authority of local school officials to respond to changing economic and demographic conditions. School officials should be granted a degree of authority which would allow state officials to hold them accountable for their actions and for the quality of their educational programs.

Legislative Recommendations

In order to achieve the Productive School Model, or to implement some of the strategies which have been discussed in this report, some statutory changes are necessary. The committee considered changes which would reduce certain costs in school operations, provide additional revenue for Iowa schools and which could allow for more productive use of resources which are currently available. The committee makes the following specific recommendations for legislative action.

School Finance

- Allow school districts which establish early graduation programs to count pre-kindergarten students in the school district's enrollment for the school finance formula.
- Adopt the recommendations of the Joint Committee on School Finance with respect to the salary improvement fund, increased minimum state aid, the Excellence in Education Levy (EXCEL) the capital projects and equipment levy and a freeze of the enrollment cushion.
- The proportion of funds from state aid for talented and gifted programs, dropout and dropout prevention programs and school improvement projects should be increased. If this recommendation is not approved, then the legislature should eliminate the requirement for approval by the Department of Education, because these programs are funded by local dollars.
- Allow special education support and instructional dollars to be used for remedial instruction of non-handicapped children. However, funding of programs for the handicapped should have first priority.

Educational Technology

- Utilization of technology by local school districts should not be regulated by the state. While the state has a legitimate role in the establishment of educational standards, the state should not regulate the methods by which local school districts comply with those standards. Those decisions should be made by education professionals at the local level. Specifically, the state should not be involved in decisions concerning the purchase of technological equipment or how educators use the technological tools at their disposal.
- School officials should have the opportunity to choose from a variety of "distance learning" education programs. We recommend that an Iowa based distance learning program be established and that it be among the options from which Iowa schools could choose.
- Clarify law concerning distance learning alternatives so they are eligible for supplemental weighting for shared programs.
- Establish a "technology tax levy" for the integration of technology into education, without voter approval.

Sharing

- Remove state regulations which require that academic sharing be a prerequisite to athletic sharing agreements.
- Allow the incentive for administrative sharing to apply to the position of principal. While we believe that every attendance center should have a principal, we recognize that this will be difficult for some school districts to achieve. However, we believe that a shared principal is preferable to assigning the responsibilities of the principal to the school superintendent.
- Change the requirements relating to the organizational meeting of the school board. The present law creates a problem for school districts which jointly employ a superintendent. We suggest that state law simply establish the date for the organizational meeting, with the time to be determined by the local school board.

Reorganziation/Dissolution

- Allow the board of a reorganized school district to seek a bond issue with a simple majority, rather than a majority of 60%.
- Continue the 102% guarantee for reorganized districts. Currently, some school districts which reorganize lose this funding.

Alternative Staff Utilization

- Allow school districts to employ persons with coaching authorizations in all coaching positions, including head coaching positions in major sports.
- School officials should be allowed to offer multiple-year contracts to new superintendents. This may improve the ability of Iowa schools to attract quality administrators from other states.
- The legislature should approve and the department should initiate, plans for alternate teacher training programs and should expand opportunities for schools to use professionals in the community as teachers, under the supervision of certificated educators.

Building Utilization

- Allow a majority vote on bond issues for regional school facilities, including regional vocational schools and high schools.

Phil Dunshee
IASB Director
of Government Relations

If local control is to remain a viable philosophy for the governance of public education, then school board members must be at the forefront of educational reform.

Statutory and Regulatory Barriers

- Legislation should be enacted which would allow school officials to provide transportation only to those students who meet the statutory eligibility requirements, and who desire transportation services. School districts should not be required to make space on school buses available to students who do not use the services. A procedure should be established which would base transportation services on utilization, as well as eligibility.
- Limit appeals of school decisions to the Department of Education to alleged violations of school laws or rules. Decisions made by school officials, such as the closing of an attendance center, should not be subject to review by the State Board if the action is in compliance with the laws and regulations established by the state.
- Eliminate requirement for the publication of quarterly statements.

Part V. Recommendations to Other Education Organizations

The following is a set of recommendations the Strategies for Excellence Committee wishes to make to selected educational organizations in Iowa.

Recommendations for the Department of Education

- Review services provided to local school districts which may duplicate services provided by other education organizations. Where duplication exists the department should consider whether changes in the services are appropriate.
- State education organizations, including IASB, ISEA, the Department of Education and the Department of Management should pursue strategies for the coordinated collection of information to establish consistency for education data and to reduce the paperwork burden in local school districts.
- Information collected by the department from local school districts should reflect current practices in Iowa schools. For example, information about the number of curriculum units provided by Iowa schools does not include units provided through sharing agreements. Curriculum unit information should reflect all units to which the students have access.
- The Department of Education should develop measures of local school district reform efforts for comparison with other states.
- The department should continue its efforts to promote the articulation and coordination of educational programs among the various educational institutions in Iowa.

Recommendations for IASB

- IASB should prepare performance-based pay plans which local school officials could propose to school employees through the collective bargaining process. Local officials could modify the plans to meet local needs.
- Encourage school board members to serve for more than one term. Iowa schools need continuity in the governance of their operations.
- Information about compensation of professional educators which is reported by IASB and other educational organizations should include the cost of all benefits and compensation for all extra-duties (athletics and extended contracts for curriculum and staff development). The information should also account for variances in the length of the contract year and the length of the contract day.
- IASB should investigate the feasibility of establishing a management consulting program to assist school districts with the implementation of the Productive School Model.
- IASB should investigate the feasibility of establishing a nonprofit organization to provide an "Iowa Satellite Education Program."
- IASB should initiate discussions with representatives of other education institutions in Iowa for the purpose of examining the expenditures for education at all levels.

Recommendations for Area Education Agencies

- The Committee examined various issues concerning the governance, operations and programs in the area education agencies. We make no recommendations about these matters. We believe the Department of Education Committee on Restructuring Education should carefully study these matters.

Recommendations for Merged Area Schools and Independent Colleges and Universities

- Merged area schools and independent colleges and universities are encouraged to initiate planning activities for cooperative arrangements with the public schools.
- Merged area schools are encouraged to play a more active role in providing vocational education programs. In particular, if local school officials desire job-specific training for their students, it should be provided by the merged area schools.
- When feasible, independent colleges and universities should provide services and programs in cooperation with neighboring school districts, as well as the public school district in which the institution is located.

Jean O'Dell
Malvern board member

I certainly learned a lot while working on this committee. I hope that at least some of the suggestions will be helpful to schools in providing an improved education for their students.

Instructions for Using Strategies for Excellence Evaluation Form

The primary purpose of the IASB Report on Strategies for Excellence is to establish goals for Iowa schools and to identify strategies which local school officals can use to achieve those goals. The first step toward achieving the goals described in this report is to compare the characteristics of your school with the characteristics of the Productive School Model. The evaluation form may be used for this comparison. While it does not cover every aspect of the model, it identifies the major characteristics of the Productive School Model, and the major strategies which were identified in the report.

Simply place a mark in the appropriate column for each characteristic, based on your judgment about whether your school compares satisfactorily with the model, needs improvement for specific characteristics, or does not have the characteristics which are identified in the report.

Strategies for Excellence Evaluation Form

	Does your school have these characteristics?		
	YES: And Is Satis-factory	YES: Needs Improve-ment	NO: Is Not Satis-factory
A. AN EDUCATIONAL FRAMEWORK			
The policy of the school district is to examine the research on effective schools and to compare the qualities of attendance centers within the school district with the qualities identified in the research on effective schools.	_____	_____	_____
The school board has established a goal that each school district achieves the characteristics of the effective school.	_____	_____	_____
Below are some of the major characteristics of the effective school which have been identified in this report. Which of the characteristics are present within each attendance center in your school district?			
1. There is an orderly, purposeful atmosphere in the school free of physical and psychological threat.	_____	_____	_____
2. The school consistently insists that students act responsibly in school and implements a discipline policy which maintains an orderly learning environment.	_____	_____	_____
3. District goals are clearly established and articulated both internally to staff and externally to the public.	_____	_____	_____
4. Leadership has a clear understanding of the school's mission, makes it highly visible and is able to articulate the mission in direct concrete terms.	_____	_____	_____
5. The principal acts as the curricular and instructional leader in each attendance center.	_____	_____	_____
6. The staff expects all students to learn and believes it has the capacity to help students achieve. Students also understand and behave in ways that demonstrate that school is for learning.	_____	_____	_____
7. Monitoring of student learning is frequent and pervasive. This information is used to both diagnose learning problems and adjust instruction.	_____	_____	_____
8. The learning climate is purposeful, and teachers are skilled in classroom management and individualized instruction techniques.	_____	_____	_____
9. There is evidence of well planned instructional lessons using research-based strategies of lesson design.	_____	_____	_____
10. Administrators and teachers are aware of and use research-based manipulation of the elements of effective instructional techniques such as motivation theory, retention theory, transfer of learning and rate and degree of learning.	_____	_____	_____
11. Guided and independent practice is skillfully used both in the classroom and in homework assignments.	_____	_____	_____
12. Parents are actively involved in the education of their children and are encouraged to volunteer their skills to assist the school. There is evidence of parent/community input into the district's goals and curriculum planning.	_____	_____	_____
13. A broad-based co-curricular activity program is available for student participation that appeals to a wide variety of student interests. Participation by students is encouraged.	_____	_____	_____

		Does your school have these characteristics?		
		YES: And Is Satis-factory	YES: Needs Improve-ment	NO: Is Not Satis-factory
14.	Awards and recognition for academic achievement are frequent.			
15.	Staff development programs are focused on district priorities and the professional growth of certificated personnel.			
16.	The management style of principals is consultative and cooperative. Principals act as teaching models and they help teachers to grow as education professionals.			
17.	The curriculum is articulated and coordinated among different grade levels and within each grade level.			
18.	Time is provided for grade level and cross grade level curriculum planning, and time is provided for curriculum meetings and coordination between elementary and secondary building staffs.			
19.	There is a strong sense of community and collegiality among the professional staff in the schools.			
20.	Use of teaching time and the quality of instruction are high priorities. Very little time is wasted and interruptions to teaching time are not tolerated.			
21.	Budgets for attendance centers are established by the board and building administrators have the ability to allocate resources within the attendance center.			

B. THE EDUCATIONAL PROGRAM

Listed below are the characteristics of an educational program which have been included in the Productive School Model. Which of the characteristics are present within your school district?

1.	Secondary students have access to a minimum of 60 curriculum units.			
2.	Students have access to educational programs which utilize current technology including computers and telecommunications.			
3.	The district meets the Productive School Model goal of a computer/student ratio of 10 to 1.			
4.	In an instructional setting the student/computer ratio is 3 to 1 or less.			
5.	Students have access to computers on weekends or are able to take computers home.			
6.	The district has in place a technology plan which includes policies for the appropriate use of technology, budgeting for the purchase of technological equipment and timelines for implementing the plan.			
7.	The district has provided for the training of school employees about the appropriate use of technology.			
8.	The educational program is designed to meet the needs of students who are college bound, vocational or technically oriented, or preparing to enter the job market without additional training.			
9.	Students are made aware of job opportunities through cooperative arrangements with public employment services and contact with the business community.			
10.	An emphasis is placed on career exploration opportunities. Job specific training is not a major objective.			
11.	Preparation for the College Level Examination Program is available for students who plan to attend college.			
12.	Accelerated programs with a college credit option are available to students.			
13.	The district provides students with opportunities for early graduation.			
14.	Post-secondary level vocational training at a merged area school is accessible to non-college bound students.			
15.	Students planning to enter the work force have access to an educational program which prepares them for the work experience.			
16.	Students who enter the work force after high school are prepared for re-entry into the education system later in life.			
17.	Students have access to an all-day, every-day kindergarten program.			
18.	Students have access to a talented and gifted program.			

		Does your school have these characteristics?		
		YES: And Is Satis-factory	YES: Needs Improve-ment	NO: Is Not Satis-factory
19.	Students have access to a dropout or dropout prevention program.			
20.	The school provides programs that allow the study of subject matter not covered in the regular school curriculum such as an extended campus, independent study or telecommunicated programs.			
21.	The school provides programs outside the traditional school setting such as work-study or on-the-job training.			
22.	Programs are provided for special needs students not served by state or federal programs, including programs for non-handicapped children who require remedial assistance.			
23.	Parents and students have opportunities to make choices about the content of the educational program and the setting in which the program is provided.			
24.	Students have access to a pre-kindergarten program.			
25.	The school district provides access to a child care program.			
26.	Students have access to a comprehensive health education program.			
27.	Extracurricular activities of an academic nature are available for students.			
28.	The district provides its citizens with access to a community education program. The program is based on a needs assessment conducted in the district.			
29.	The school district regularly uses criterion referenced tests to assess student strengths and weaknesses and adjust student educational programs.			
30.	The school district annually reports to its public the results of a standardized test administered to assess the progress of all students in the district.			
31.	The district has complied with the needs assessment and goal setting requirements of Section 280.12 of the *Iowa Code*.			
32.	The district has reviewed its demographic data within the past two years.			
33.	The district maintains a mechanism to ensure adequate class sizes so that staff is efficiently allocated, classes are financially viable and the educational environment for students is challenging.			

C. HUMAN RESOURCES IN EDUCATION

Listed below are characteristics of the Productive School Model which relate to roles and responsibilities of school administrators and teachers. Which of the characteristics are present within your school system?

1.	Sufficient personnel are employed to implement an external communication program to the public about school programs and services.			
2.	Sufficient personnel are employed to implement a systematic program and plan for needs assessment and district planning. This includes the assessment of current educational research with respect to district practices.			
3.	Sufficient personnel are employed to implement a systematic program for budget development and implementation as well as fiscal planning.			
4.	Sufficient personnel are employed to implement a comprehensive program for human resources management. This includes development of job descriptions, recruitment of quality personnel, contract administration and negotiation, staff development programs and employee induction programs.			
5.	Sufficient personnel are employed to implement a comprehensive and coordinated instructional program.			
6.	Principals are not assigned functions which are not directly related to the educational program and to the performance of teachers in the classroom.			
7.	The positions of superintendent and principal are not combined.			
8.	Job descriptions are written for administrative instructional and support staff. Job descriptions are used as the basis for evaluating the performance of school employees.			
9.	Compensation plans are in place to attract and retain qualified and competent administrators and teachers and to reward outstanding performance outside of the strict salary schedule approach.			

		Does your school have these characteristics?		
		YES: And Is Satis-factory	YES: Needs Improve-ment	NO: Is Not Satis-factory
10.	Teachers have a meaningful voice in the decision-making process with respect to: materials, instructional methods, the organization of the school day, evaluation and placement of students and the consultants who are used in staff development and curriculum development programs.	_____	_____	_____
11.	Yearly evaluation of supervisors is conducted in relation to job descriptions. Supervisors are held to a high degree of accountability.	_____	_____	_____
12.	Teachers are frequently observed and conferred with to improve the quality of instruction. At a minimum a yearly observation is made of all staff.	_____	_____	_____
13.	Time is made available to staff to observe and visit other teachers and assist peers in professional growth.	_____	_____	_____
14.	The building administrator does demonstration teaching for the faculty and demonstrates effective observation and conference techniques.	_____	_____	_____
15.	No teacher in the district is teaching outside of his or her certification area.	_____	_____	_____
16.	No secondary teacher in the district has more than an average of three preparations per school day.	_____	_____	_____
17.	The district has made an identifiable effort to reduce non-instructional duties of teaching staff.	_____	_____	_____
18.	The district has in place a plan which provides support and assistance to beginning teachers.	_____	_____	_____
19.	A percentage of the budget is established for staff growth and development. This is a planned expenditure and not left to chance or dependent upon finding the necessary funds.	_____	_____	_____
20.	Staffing patterns are in place which allow students to be grouped into multiple sections (at least two) in most courses and grade levels.	_____	_____	_____
21.	The district has in place a plan for the effective recruitment of personnel including specific provisions for minority recruiting.	_____	_____	_____

D. THE EDUCATIONAL ENVIRONMENT

Listed below are characteristics of the Productive School Model which relate to the support functions, facilities and equipment and financial resources for Iowa schools. Which of the characteristics are present within your school system?

1.	Sufficient support staff is provided for school administrators to allow for concentration on activities related to education policy and evaluation.	_____	_____	_____
2.	Sufficient support staff and services are provided to allow teachers more time to prepare lesson plans, devise alternative learning strategies for individual students and implement other learning activities.	_____	_____	_____
3.	Counseling services are available to students at the junior high or middle school level.	_____	_____	_____
4.	Counseling services are provided at the elementary level.	_____	_____	_____
5.	The district provides a quality environment for its staff and students with the adequate physical resources and tools to provide a successful learning environment.	_____	_____	_____
6.	The district has an appropriate cycle for replacement of textbooks and materials.	_____	_____	_____
7.	The district has complied with all regulations regarding the storage and labeling of hazardous chemicals.	_____	_____	_____
8.	The district has complied with all regulations regarding the removal or encapsulation of asbestos.	_____	_____	_____
9.	A preventive maintenance schedule and routine inspection procedures of school facilities is in place.	_____	_____	_____
10.	The district utilizes all available sources of revenue to achieve the characteristics of the Productive School Model, including additional allowable growth for talented and gifted programs, dropout programs and school improvement projects.	_____	_____	_____

	Does your school have these characteristics?		
	YES: And is Satis-factory	YES: Needs Improve-ment	NO: Is Not Satis-factory

E. STRATEGIES FOR EXCELLENCE

Listed below are strategies which may help schools to achieve the characteristics of the Productive School Model. Which of the strategies are being utilized in your school district?

1.	Technological tools such as computers and telecommunications equipment are used to improve the efficiency of the instructional and administrative staff and to deliver educational programs to students.	_____	_____	_____
2.	Pupil/teacher ratios have been increased to assure the efficient and effective utilization of the professional staff.	_____	_____	_____
3.	Optional class scheduling plans, such as early bird classes, or modular scheduling are used to effectively utilize the time available for instruction during the school day.	_____	_____	_____
4.	Expanded course offerings are made available by establishing summer school programs or academic summer camps.	_____	_____	_____
5.	Voluntary open enrollment programs between school districts are established to provide parental choice and to meet specific educational needs.	_____	_____	_____
6.	A whole grade or curriculum specific sharing agreement has been established with another school district.	_____	_____	_____
7.	Extracurricular activities are shared with another school district.	_____	_____	_____
8.	Administrative or specialized education functions are shared with another school district.	_____	_____	_____
9.	Resources available from other education agencies, such as the Department of Education, area education agencies, merged area schools, independent colleges and universities, and the Iowa Association of School Boards are fully utilized.	_____	_____	_____
10.	A coordinated plan for using volunteers and teacher aides is established.	_____	_____	_____
11.	Extended contracts are utilized to provide teachers with opportunities to perform non-supervisory administrative functions, staff development and curriculum development.	_____	_____	_____
12.	Facilities are shared with other government agencies or private organizations.	_____	_____	_____
13.	School buildings with insufficient enrollments are closed, leased or sold to other organizations.	_____	_____	_____
14.	Discretionary sources of revenue such as additional allowable growth or the enrichment levy are utilized.	_____	_____	_____
15.	User charges for consumable services are fully utilized.	_____	_____	_____
16.	An education foundation or endowment trust has been established.	_____	_____	_____
17.	Transportation services which are not mandated by law are limited.	_____	_____	_____
18.	Where other alternatives have proven to be insufficient as strategies for achieving the Productive School Model, the school district is reorganized with another school district, or is dissolved.	_____	_____	_____

The evaluation form was prepared by the Iowa Association of School Boards, and was not a part of the official report adopted by the committee or by the IASB Delegate Assembly.

Footnotes

1. The College Board, *Mean SAT Scores by State*, 1980-86, Sept. 23, 1986.
2. Executive Summary, *Iowa ACT Assessment Results*, 1985-86.
3. Iowa Association of School Boards.
4. Iowa Department of Management.
5. Iowa Department of Education.
6. *Ibid.*
7. Adjusted figures were derived from information provided by the Department of Education, and the Consumer Price Index, as published in the *IASB Wage and Salary Report*, Iowa Association of School Boards, February, 1986.
8. Iowa Association of School Boards.
9. Office for Planning and Programming, *The Iowa School Foundation Plan*, 1977-74.
10. Iowa Association of School Boards.
11. *Ibid.*
12. *Ibid.*
13. *Ibid.*
15. Department of Education, Iowa School Data, 1976-1986.
16. Department of Education.
17. *Ibid.*
18. Iowa Association of School Boards.
19. *Ibid.*
20. Department of Education.
21. *Ibid.*
22. *Ibid.*
23. *Ibid.*
24. *Ibid.*
25. *Ibid.*
26. *Ibid.*
27. *Ibid.*
28. *Ibid.*
29. Iowa Association of School Boards.
30. Department of Education.
31. *Ibid.*
32. *Ibid.*
33. *Ibid.*
34. The National Task Force on Educational Technology, *Transforming American Education*, April, 1986.
35. Department of Education, *Iowa Guidance Surveys*, December, 1985.
36. Department of Education.
37. *Ibid.*
38. *Ibid.*
39. Department of Education, *Iowa Guidance Surveys*, December, 1985.
40. Department of Education.
41. *Ibid.*
42. Department of Education, *Iowa Guidance Surveys*, December, 1985.
43. Department of Education.
44. *Ibid.*
45. *Ibid.*
46. *Ibid.*
47. *Ibid.*
48. *Ibid.*
49. *Ibid.*
50. *Ibid.*
51. *Ibid.*
52. Iowa Association of School Boards.
53. *Ibid.*
54. *Ibid.*
55. *Ibid.*
56. *Ibid.*
57. *Ibid.*
58. National Education Association.
59. Education Commission of the States
60. *Ibid.*
61. PERB v. Aplington v. (Ia. Supreme Ct., 1986)
62. Pupil/teacher ratios were derived from enrollment and employment data provided by the Department of Education.
63. Department of Education.
64. *Ibid.*
65. Aggregate budget information for sharing programs was derived from information provided by the Department of Education.
66. Department of Education.
67. *Ibid.*
68. *Ibid.*
69. *Ibid.*
70. *Ibid.*
71. Iowa High School Music Association.
72. Department of Education.
73. Iowa High School Athletic Association.
74. *Ibid.*
75. *Ibid.*
76. *Ibid.*
77. Iowa Girls High School Athletic Union.
78. *Ibid.*
79. Iowa Association of School Boards, *Beliefs and Resolutions*, June, 1985.
80. Department of Education.
81. *Ibid.*
82. *Ibid.*
83. *Ibid.*
84. *Ibid.*
85. *Ibid.*

Note: Throughout this report, the analysis of school districts within different enrollment categories was based on information provided by the Department of Education. In most cases, information provided by the department about school districts was not categorized based on enrollment. This procedure was conducted by the authors.

Bibliography

American Association of School Administrators and the Far West Laboratory. *Excellence In Our Schools: Making It Happen*. 1984.

Anderson, Dr. William. *School Problems Related to People Concentration, Des Moines Public Schools*. Presented to the Interim Study Committee on Education. 1985.

Carnegie Forum on Education and the Economy's Task Force on Teaching as a Profession. *A Nation Prepared: Teachers For the 21st Century*. New York: 1986.

The College Board. *Mean SAT Scores by State, 1980-86*. 1986.

Darnell, Dr. David F. *Computer Do's and Don'ts for the School Administrator, A Special Presentation For the New Administrators Action Lab*. 1985.

Des Moines Community School District, Cedar Rapids Community School District. *Job Descriptions*. 1986.

Dunshee, Philip. *Sharing/School Closing/Reorganization, A Review of News Reports, April-August, 1986*. Iowa Association of School Boards. Des Moines: 1986.

Education Policies, Practices and Research. Research and Development Center, University of Texas: 1984.

Executive Summary, Iowa ACT Assessment Results. 1985-86.

First In the Nation in Education. *Final Report*. Des Moines: 1984.

Greenhalgh. *School Site Budgeting: Decentralized School Management*, University Press of America, 1984.

Herrity, Joseph P. *Position Paper On Community Education*. Iowa Department of Education. Des Moines: 1986.

Howey, K.R., Matthes, W.A., Zimpher, N.L. *Issues and Problems In Professional Development; Highlight Summary*. North Central Regional Educational Laboratory, 1986.

Iowa Association of School Boards. Rural Education Study Committee. 1978.

Iowa Association of School Boards. *Comparison of 1984-85 Cost of Administration In Iowa K-12 School Districts*. Des Moines: 1986.

Iowa Association of School Boards. "Supreme Court Upholds School Closing." *Special Report*, 6 (1983).

Iowa Association of School Boards. *Toward Excellence, A Guide for Iowa School Board Members Planning with Their Communities*. Des Moines: 1984.

Iowa Business and Education Survey: A Study to Examine the Ways in Which Business and Education Cooperate and the Preparation of High School Graduates for Employment. Education and Industry Coordination Subcommittee of the Excellence in Education Task Force, 1984.

Iowa Department of Education and Area Education Agencies. *Statewide Needs Assessment Study of Area Education Agency Services, Executive Summary*. Des Moines: 1986.

Iowa Department of Education. *Final Report of the Study Committee on Equitable Funding Approaches for Vocational Education For Secondary School-Age Students*. Des Moines: 1982.

Iowa Department of Education. *Report on Employer Perception; 1985 Survey*. Des Moines: 1986.

Iowa Department of Education. *Limited English Proficiency Student Count for the 1985-86 School Year*. Des Moines: 1986.

Iowa Department of Education. Data Analysis and Statistics Section. *K-12 Enrollment Statistics*. Des Moines: 1985-86.

Iowa Department of Education. "The Dropout, Fiscal Year 1985." "The Graduate — One Year After, Fiscal Year 1984." *Iowa Guidance Surveys*. Des Moines: 1985.

Iowa Department of Education. *Renewing the Commitment: A Plan For Quality Education In Iowa*. Des Moines: 1986.

Iowa Department of Education. *Iowa School Data, 1976-1986*. Des Moines: 1986.

Iowa Department of Education. *Listing of Local Community Education Sites and Community School Districts, FY 1986-87*. Des Moines: 1986.

Iowa Department of Education. *School Transportation Report*. Des Moines: 1985.

Iowa Department of Public Instruction. *Biennial Report 1982-84*. Des Moines.

Iowa Department of Public Instruction. *Final Report of the Task Force on Comprehensive School Health Education*. Des Moines: 1979.

Iowa Department of Transportation. *Public and Private Transportation Coordination Project Progress Report*. Des Moines: 1986.

Iowa Office for Planning and Programming. *The Iowa School Foundation Plan: A Brief Historical Review of Background Factors, the Development and Adjustments in the Plan, and a Summary of the Results*. Des Moines: 1973-74.

Iowa State Board of Regents and the Department of Public Instruction. *Educational Excellence For Iowa, Final Report of the Joint Committee on Instructional Development and Academic Articulation In Iowa*. Des Moines: 1984.

The Johns Hopkins University. Center for Social Organization of Schools. *Instructional Uses of School Computers, Reports from the 1985 National Survey*. 1986.

Marshalltown Community School District. Citizens' Advisory Committee. *Report on Declining Enrollment*. Marshalltown: 1980.

Morley, Raymond E. *Alternative Schools and Programs In Iowa's Education System: Perpectives on Curriculum and Management*. Iowa Department of Education. Des Moines: 1986.

National Alliance of Business. *Employment Policies: Looking to the Year 2000*. Washington, D.C.: 1986.

The National Commission on Excellence in Education. *A Nation At Risk: The Imperative For Educational Reform*. 1983.

The National Institute of Education. *Economy, Efficiency, and Equality: The myths of rural school and district consolidation*. 1976.

National Governors' Association Center for Policy Research and Analysis. *Time For Results, The Governors' 1991 Report on Education*. Des Moines: 1986.

National School Boards Association. *A Blueprint for Educational Excellence, A School Board Member's Guide*. Alexandria, VA: 1984.

National School Boards Association. *New Technologies: Key to More Productive Schools*. Alexandria, VA: 1985.

National School Public Relations Association. *Choices In Schools: What's Ahead and What To Do, Education USA Special Report*. Arlington, VA: 1985.

"New Satellite Network To Beam Instruction to Schools in Texas." *Education Week*, Sept. 11, 1985.

Perelman, Dr. Louis J. *Planning The Transformation: A Systems Approach*. 1986.

Personick, Valerie A. "A second look at industry output and employment trends through 1995." *Monthly Labor Review*, (Nov. 1985).

Robinson, Glen E. and Wittebols, James H. *Class Size Research: A Related Cluster Analysis for Decision Making*. Educational Research Service Inc., 1986.

"Satellite-link 'school' opens." *Express-News*, San Antonio, TX, Sept. 5, 1985.

Schlechty, Phillip C. "A Framework for Evaluating Induction Into Teaching," Beyond the Looking Glass. *Papers from a National Symposium on Teacher Education Policies, Practices and Research*. Research and Development Center, University of Texas: 1984.

Sheffield, Virginia K. *Refinement of the Elementary and Secondary School Foundation Plan: A Proposal For Improving the Fiscal Adequacy and Equity of the Instructional Program of Iowa Schools*. National Conference of State Legislatures. Washington, DC: 1982.

Stinard, Thomas A. "Synopsis of Research on Kindergarten Scheduling: Half-Day, Everyday; Full Day, Alternate Day; and Full Day, Everyday." 1982.

"Televised Classes Help Rural High Schools Offer Fuller, More Demanding Curricula." *The Wall Street Journal*, Nov. 12, 1985.

Tack, Leland R. *Public School Finance In Iowa*. Iowa Department of Education. Des Moines: 1986.

TI-IN. *TI-IN Broadcast Schedule and Course Guide*. 1986-87.

U. S. Department of Education. The National Task Force on Educational Technology. *Transforming American Education: Reducing The Risk To The Nation, A Report to the Secretary of Education*. Washington, DC: 1986.

Waterloo Community School District. *Charge to the Advisory Task Force on Declining Enrollment in the Waterloo Community Schools*. Waterloo: 1986.

Wemette, Tom. "A Model For Iowa's Secondary Schools." 1984.

Wright, David A. *1985 Iowa Substance Education Program Study; Executive Summary and Recommendations*. Iowa Department of Education. Des Moines: 1986.

Effective Schools Research

Periodicals:

Calabrese, R.L. "Effective Schools and Classroom Instruction." *Clearing House*, 59 (1986), 272-74.

Cohen, M. "Policy Implication of Effective Schools Research." *Elementary School Journal*, 85 (1985), 277-463.

Cuban, L. "Transforming the Frog into a Prince: Effective Schools Research, Policy, and Practice at the District Level." *Harvard Educational Review*, 54 (1984), 129-51.

"Effective Schools." *Educational Leadership*, 40 (1982), 4-26.

Evans, Robert W. "Ohio's Effective School Program." *American Secondary Education*, 12 (1983), 2-3.

Farley, J. R. "Some Characteristics of Leaders of Effective Schools." *American Secondary Education*, 12 (1983), 24-6.

Farrar, E. et al. "Effective Schools Programs in High Schools, Social Promotion or Movement by Merit?" *Phi Delta Kappan*, 65 (1984), 701-6.

Finn, C.E. "Nine Commandments for School Effectiveness." *Education Digest*, 50 (1985), 10-13.

Hallinger, Peter. "Effective High Schools — What Are the Common Characteristics?" *NASSP Bulletin*, 69 (1985), 18-22.

Herbert, Bruce E. "Educational Effectiveness: Now or Never." *American Education*, 19 (983), 5-11.

Levine, D. U. et al. "Characteristics of Effective Inner-city Intermediate Schools." *Phi Delta Kappan*, 65 (1984), 707-11.

Levine, Marsha. "Excellent Companies and Exemplary Schools; Common Goals, Characteristics." *NASSP Bulletin*, 69 (1985), 56-69.

Lezotte, Lawrence W. "Characteristics of Effective Schools and Programs for Realizing Them." *Education Digest*, 48 (1982), 27-9.

Lieberman, Ann and Lynn Miller, "School Improvement: Themes and Variations." *Education Digest*, 50 (1985), 11-13.

Murphy, Joseph F. et al. "Creating Effective School Districts: Lessons from Practice, Research, and National Reports." *American Education*, 20 (1984), 13-14.

Miller, S.K. et al. "Effective Schools and Educational Change: Implications for Teacher Educators." *Teacher Educator*, 19 (1984), 2-13.

Pink, W.T. and D.K. Wallace. "Creating Effective Urban Elementary Schools: A Case Study of the Implementation of Planned Change. (Effective Schools Pilot Project in Kansas City, MO)." *Urban Education*, 19 (1984), 273-315.

Pruyn, James. "Factors that Contribute to School Effectiveness." *Thrust*, 12 (1983), 18-21.

Purkey, S.C. and M.S. Smith. "Effective Schools: A Review." *Elementary School Journal*, 83 (1983), 426-52.

"Research-based School Reform: Priorities, Levels of Confidence, and Cautions." *Peabody Journal of Education*, 61 (1984), 125-34.

Reports: National

Adler, Mortimer, J. "An Educational Manifesto." *Paideia Proposal*. 1982.

Anderson, R. and David Saxon. *America's Competitive Challenge*. Business Higher Education Forum. 1983.

Boyer, Ernest L. *A Report on Secondary Education in America*. Carnegie Foundation. 1983.

College Board. Education Equality Project. *Academic Preparation for College*. 1983.

Gardner, David P. *A Nation at Risk*. National Commission on Excellence in Education. 1983.

Goodlad, John I. "A Place Called School." 1983.

Hunt, James, Jr. *Action for Excellence*. Task Force on Education for Economic Growth. Education Commission of the States. 1983.

Sizer, Theodore R. *A Study of High Schools*. National Association of Secondary School Principals and the Commission of Educational Issues of the National Association of Independent Schools. 1984.

Wood, Robert. *Making the Grade*. Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy. 1983.

Reports: State of Iowa

State of Iowa. Excellence in Education Task Force. *First In the Nation in Education*. Des Moines: 1984.

Iowa Association of School Boards. *Toward Excellence*. Des Moines: 1984.

Iowa State Board of Regents and Department of Public Instruction. Joint Committee on Instructional Development and Academic Articulation in Iowa. *Education Excellence For Iowa*. Des Moines: 1984.

Kindergarten and Prekindergarten Research

Books:

Headley, Neith. *The Kindergarten: Its Place in the Program of Education*. New York: The Center for Applied Research in Education, Inc., 1965.

Leavitt, Jerome E. ed. *Nursery-Kindergarten Education*. New York: McGraw Hill, 1958.

Lillard, Paula Polk. *Children Learning: A Teacher Classroom Diary*. New York: Schocken Books Inc., 1980.

Weber, Evelyn. *The Kindergarten*. New York: Teachers College Press, 1969.

Periodicals:

Alper, C.L. and D.O. Wright. "Extended Day Kindergarten Plus Parent Involvement: A Combination that Works." *Phi Delta Kappan*, 61 (1979), 68.

Anderson, Eleanor V. "Comparing Full-Day and Half-Day Kindergartens." *Journal of School Research and Information*, 3 (1985) 3-10.

Cruikshank, Susan B. "All-day Kindergarten: What Every Parent Should Know." *PTA Today*, 11 (1986) 12-13.

Glazer, Judith S. "Kindergarten and Early Education: Issues and Problems." *Childhood Education*, 62 (1985) 13-18.

Goronowich, D.J. et al. "A School District Looks at an Alternative to Half-day, Everyday Kindergarten Programs." Grand Rapids Independent School District. Grand Rapids, MI: 1974.

Gorton, H.B. and R.L. Robinson. "A Study of Kindergarten Programs, Full-day or Half-day." ERIC ED 017 327.

Hatcher, B.A. and V. Schmidt. "Half-day vs. Full-day Kindergarten Programs." *Childhood Education*, 57 (1980).

Herman, Barry E. "The Case for the All-Day Kindergarten. Fastback 205." Phi Delta Kappan Educational Foundation, (Indiana, 1984).

Humphrey, J.W. *A Study of the Effectiveness of Full-day Kindergarten*. Evansville-Vanderburgh Schools Corp. Evansville, IN: 1980.

Humphrey, Jack. "A Comparison of Full-Day and Half-Day Kindergartens." *Spectrum*, 1 (1983) 11-16.

Jones, Bobbie and Louise Miller. "Four Preschool Programs: Their Lasting Effects." Louisville, KY: University of Louisville, 1977.

Lazar, Irving. "Preschool Programs and Later School Competence of Children from Low-Income Families." *Science*, 11 (1980) 202-4.

Lynch, Daniel and Richard Harness. *Effects of School Environment on Disadvantaged Kindergarten Children, With and Without a Head Start Background: Final Report*. Oshkosh: Wisconsin State University.

Naron, N.K. "Need for Full-day Kindergarten." *Educational Leadership*. 38 (1981), 306-09.

Neel, Ann F. "Preschool Education: Lessons Learned - Questions Asked." *Child Welfare*, (July 1975) 487-94.

Nieman, R.H. and J.F. Gastright. "Pre-School Plus All-day Kindergarten: The Cumulative Effects of Early Childhood Programs on the Cognitive Growth of Four-and-Five-Year-Old Children." Unpublished Paper, American Educational Research Association. Washington, D.C.: 1975.

Oelerich, Marjorie. "Should Kindergarten Children Attend School All Day Every Day?" *Mankato Statement: The Journal of the College of Education*, (Fall 1984), 13-16.

Robertson, L.F. "Why We Went Back to Half-days." *Principal*, 64 (1984), 22-24.

Schweinhart, Lawrence J. and David P. Weikart. "Young Children Grow Up: The Effects of the Perry Preschool Program on Youths Through Age 15." Monograph No. 7. Ypsilanti, Mich.: High/Scope Educational Research Foundation, 1980.

Schweinhart, Lawrence J. and David P. Weikart. "Evidence That Good Early Childhood Programs Work." *Phi Delta Kappan*, (April 1985), 545.

Schweinhart, Lawrence J., John R. Berrueta-Clement, W. Steven Barnett, Ann S. Epstein, and David P. Weikart. "The Promise of Early Childhood Education." *Phi Delta Kappan*, (April 1985), 548.

Teply, Joan. "Young Children's Recall in Every-Day and Alternate-Day School Schedules." *Child Study Journal*, 15 (1985), 283-92.

Ulrey, Gordon L., et al. "Effects of Length of School Day on Kindergarten School Performance and Parent Satisfaction." *Psychology in the Schools*, 19 (1982) 238-42.

Winter, M. and A. Klein. *Extending the Kindergarten Day: Does it Make a Difference in Disadvantaged Pupils*? Bureau of Elementary and Secondary Education. Washington, D.C.: 1970.

Zimiles, Herbert, et al. *Comparative Study of the Impact of Two Contrasting Educational Approaches in Head Start*. New York: Research Division, Bank Street College of Education, 1969.

Research Reports:

Anderson, Eleanor. "Increasing School Effectiveness: The Full-Day Kindergarten." Annual Meeting of the American Educational Research Association New Orleans. 23-27 April 1984.

Brown, Lois E., Ph.D. "Academic and Social Effects of Half-day and All-day Kindergarten." Purdue University 1985.

Chorvinsky, Milton. *Preprimary Enrollment 1980*. National Center for Education Statistics (ED), Washington, D.C.: 1981.

Finkelstein-Marshall, Judith, Ph.D. "A Comparison of Full Day, Alternate Day and Half Day, Everyday Kindergarten in Iowa, Focusing on Instruction Time, Congruence Between Goals and Outcomes, and Principal, Teacher and Pupil Attitudes." University of Minnesota 1983.

Graja, Richard Charles E.D. "An Analysis of Full Day Kindergarten Programs." Rutgers The State University of New Jersey 1984.

Harman, Deborah L. "Extended-Day Kindergarten vs. Half-Day Kindergarten Achievement Differences." Master's Thesis, Kean College of New Jersey 1982.

Hebbeler, Kathleen M. *Follow-up Study of Students in the Early Admission Program*. Montgomery County Public Schools. Dept. of Educational Accountability. Rockville, MD: 1983.

Johnson, Jessie. "Language Development Component: All Day Kindergarten Program. Final Evaluation Report." 1983.

Schierer-Robertson, Karen, Ph.D. "Ethnographic Study of Full Day Versus Half Day Kindergarten." University of Iowa 1985.

Schweinhart, Lawrence J. *Early Childhood Development Programs in the Eighties: The National Picture*. High/Scope Early Childhood Policy Papers, No. 1. High/Scope Educational Research Foundation, Ypsilanti, MI: 1985.

Stinard, Thomas A. *Synopsis of Research On Kindergarten Scheduling: Half-Day, Everyday, Full Day, Alternate Day; and Full Day Everyday*. Grant Wood Area Education Agency. Cedar Rapids: 1982.

Warjanka, Irene. "Differential Effect of Length of Day on Kindergarten Readiness." M.A. Thesis, Kean College of New Jersey 1982.

Reports:

Berrueta-Clement, John R., Schweinhart, Lawrence J., Barnett, Steven W., Epstein, Ann S. and Weikart, David P. *Changed Lives: The Effects of the Perry Preschool Program on Youths Through Age 19*. Ypsilanti, MI: High/Scope Press, 1984.

Gray, Susan W., Ramsey, Barbara K. and Klaus, Rupert A. *From 3 to 20 - The Early Training Project*. Baltimore University Park Press 1982.

Garber, Howard L. and Heber, Rick. "The Efficacy of Early Intervention with Family Rehabilitation," in Michael J. Begab, H. Carl Haywood, and Howard L. Garber. eds., *Psychosocial Influences in Retarded Performance, Vol. II: Strategies for Improving Competence*. Baltimore: University Park Press, 1981.

Irvine, David J. "Evaluation of the New York State Experimental Prekindergarten Program." Annual meeting of the American Educational Research Association, New York. 1982.

Levenstein, Phyllis, O'Hara, John and Madden, John. "The Mother-Child Home Program of the Verbal Interaction Project." *As the Twig is Bent . . . Lasting Effects of Preschool Programs*. Consortium for Longitudinal Studies. Hillsdale, N.J.: Erlbau, 1983.

Monroe, Eleanor and McDonald, M.S. "A Follow-Up Study of the 1966 Head Start Program. Rome City Schools, Rome, GA: 1981.

Palmer, Francis H. "The Harlem Study: Effects by Type of Training, Age of Training, and Social Class," in *As the Twig Is Bent . . . Lasting Effects of Preschool Programs*. Consortium for Longitudinal Studies. Hillsdale, N.J.: Erlbau, 1983.

Class Size Research

Bossert, Steven T., Barnett, Bruce G. and Filby, Nikola N. "Grouping and Instructional Organization." Penelope L. Peterson, Louise Cherry Wilkinson, and Maureen Hallinan, eds., *The Social Context of Instruction: Group Organization and Group Process*. San Francisco: Academic Press, 1984.

Bossert, Steven T. and Barnett, Bruce G. *Grouping for Instruction: A Catalog of Arrangements*. San Francisco: Far West Laboratory for Educational Research and Development 1981.

Down, A. Graham. "Point/Counterpoint: Does Class Size Make a Difference?" *Instructor*, (Nov. 1979), 22.

Educational Research Service. "Class Size Research: A Critique of Recent Meta-Analyses," *Phi Delta Kappan*, (Dec. 1980), 239-41; Gene F. Glass, "On Criticism of Our Class Size/Student Achievement Research: No Points Conceded," *Phi Delta Kappan*, (Dec. 1980) 242-44; and Educational Research Service, "ERS Response to the Class Rebuttal," *Phi Delta Kappan*. (Dec. 1980), 244.

Filby, Nikola N. "Evidence of Class-Size Effects." Annual convention of the American Association of School Administrators, Anaheim, CA 1980.

Glass, Gene V. and Smith, Mary Lee. "Meta-Analysis of Research on the Relationship of Class Size and Achievement." Class Size and Instruction Project, Leonard S. Cahen, principal investigator. San Francisco: Far West Laboratory for Educational Research and Development, 1978.

Hawkinson, Howard. "Hatch School — Not at Risk," *Phi Delta Kappan*, (Nov. 1984), 181-82.

Hedges, Larry V. and Stock, William. "The Effects of Class Size: An Examination of Rival Hypotheses," *American Educational Research Journal*. (Spring 1983), 63-85.

Klein, Karen. "Practical Applications of Research. The Research on Class Size." *Phi Delta Kappan*, (April 1985) 578.

McKenna, Bernard. "Policy Implications of Research on Class Size: View from the National Education Association," Gene V. Glas et al., *School Class Size: Research and Policy*. Beverly Hills, CA: Sage, 1984.

Smith, Mary Lee and Glass, Gene V. "Relationship of Class Size to Classroom Processes, Teacher Satisfaction, and Pupil Affect: A Meta-Analysis," Class Size and Instruction Project, Leonard S. Cahen, principal investigator. San Francisco: Far West Laboratory for Educational Research and Development, 1979.

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